370.94
Sch1e

EDUCATION AND THE SOCIAL CRISIS IN EUROPE

Reprinted from
THE YEAR BOOK OF EDUCATION
By EVANS BROTHERS LIMITED, LONDON, W.C.1
Price 2s. 6d. net

Return this book on or before the **Latest Date** stamped below. A charge is made on all overdue books.

University of Illinois Library

OCT 24 1946

JAN 22 1954

MAR 21 1957

NOV 12 195

NOV 26 1957

NOV 25 1958

JAN 31 1974

FEB 27

MAR 27 1974

MAR 15 1974

27214

EDUCATION AND THE SOCIAL CRISIS IN EUROPE

by

REINHOLD SCHAIRER

With a Foreword by

HARLEY V. USILL

General Editor: "The Year Book of Education"

Reprinted from
THE YEAR BOOK OF EDUCATION
By EVANS BROTHERS LIMITED, LONDON, W.C.1

THE
YEAR BOOK OF EDUCATION

JOINT EDITORIAL BOARD

Prof. F. CLARKE (Chairman)
Director of the University of London
Institute of Education

SIR PERCY NUNN
Formerly Director of the University of London
Institute of Education

Prof. H. R. HAMLEY
Professor of Education, University of London
Institute of Education

G. WINTHROP YOUNG
Wall Reader in Education, King's College,
University of London

GENERAL EDITOR

HARLEY V. USILL

Price 35/- net

Published in association with
The University of London Institute of Education
By Evans Brothers Ltd., Russell Square, London

Printed in Great Britain by
Hazell, Watson and Viney, Ltd., London and Aylesbury

370.94
Sch1e

FOREWORD

SINCE 1935, Dr. Schairer has been engaged upon original research into the conditions of education in a number of countries in Europe. The results of his investigations have appeared in subsequent volumes of the YEAR BOOK OF EDUCATION and these have created considerable interest among educationists throughout the world. That there is a social crisis few educationists acquainted with the facts would deny, but the relation of education to this crisis has not been so generally appreciated. This is largely due to the fact that comparative education is largely a neglected science, and as a result, administrators, teachers and students, are too often unacquainted with the educational systems and problems of countries other than their own. Yet, when a scientific investigation of a given problem is made in several countries, it is almost invariably found that the causes and effects are the same in each country, although the attempted solutions may vary considerably.

Dr. Schairer, in this reprint from the YEAR BOOK OF EDUCATION, has dealt with a number of acute problems which are agitating the minds of educationists in all parts of the world, although his actual investigations are confined to countries in Europe. It is hoped that the publication of this material in a separate form will make it more accessible for study by those who wish to know about the major problems which are affecting the social welfare of peoples to-day, and the part which education is called upon to play in attempting to find a solution.

If the experiment of reprinting this survey is successful, it is the intention of the publishers to make available the subsequent work of Dr. Schairer in a similar manner.

H. V. U.

Educ. 29 My 45 Reed Steel
15 Fe 45 Marshall

CONTENTS

CHAPTER PAGE

ONE GENERAL SURVEY OF THE PROBLEM . 7

TWO THE UNIVERSITÉ DU TRAVAIL AT CHARLEROI 13

THREE SCHEME FOR AIDING TALENTED PUPILS IN BELGIUM 26

FOUR THE FONDATION UNIVERSITAIRE: BELGIUM 41

FIVE THE ATELIERS-ECOLES: PARIS . . 49

SIX FRANCE: VOCATIONAL TRAINING AND LEGISLATION 64

SEVEN DENMARK AS AN EXAMPLE OF THE INTENSIVE EDUCATION OF A PEOPLE 70

EIGHT PRACTICAL PROBLEMS OF THE RAISING OF THE SCHOOL-LEAVING AGE IN EUROPE 96

NINE TWO GREAT INTERNATIONAL EDUCATIONAL ORGANISATIONS . . . 111

CHAPTER ONE

General Survey of the Problem

IN the present period of educational transition, which on the Continent takes the form of a crisis, nothing is more important than that England, and other countries, should arrive gradually at a better understanding of the nature of each other's problems.

The following considerations may be of importance. There is no prospect of a solution of the European crisis unless the educational crisis is solved prior to, or at any rate simultaneously with, the political and economic problems. The origins of this crisis lie in human nature itself. Something in man's innermost centre has got out of order.[1] Only a new form of education, effective in the best sense of the word and extending to all school ages, can deal with this, and solve the crisis.

The Position in Great Britain

Owing to her isolation, England has only, after the lapse of years, become aware of the waves of development shaking the Continent during the last centuries, and then only as profound movements of the masses. So far no great continental movement has had any direct repercussion in England. This is true also of the wave of Romanticism, the great revolutionary movement at the end of the eighteenth century. Before any such convulsion reached England, counter forces were already in action, diminishing its force, while diverting its valuable impulse into the rhythmic movement of her own development.

The same process is at the present moment in action in the English educational system. A foreign observer can even now discern in the Anglo-Saxon educational world a number of phenomena which, often in the same sequence, were observable ten or twelve years ago in different continental countries. The convulsion is therefore common to the entire Western system of civilisation ; not merely a chance sequence of events. Its effects upon the future must be profound. And England is not only equally, but primarily concerned to find a solution consonant with the spirit of growing unity in the territories of the West, with their sense of justice, humanity and liberty.

---

[1] We may recall the last official pronouncement of Albert Thomas, the founder of the International Labour Office, who, at the close of the last big report dealing with its work, according to a verbal reproduction, said something like this : " All external things and conditions lie ready to solve the world crisis and make all men rich and happy. If we fail in this task, the fault lies in our hearts alone."

The Need for Elucidation of the Problem

The Year Book of Education since its inception has been devoting attention to the Continental crisis. Continental educators have been sensible of the importance of this departure from historical isolation.

The contributions which follow concerning various Continental countries are to serve the same purpose of elucidation. They cannot present a complete picture of the Continental crisis in education, much less of the educational structure of individual countries. They have been selected so as to reveal one aspect of the crisis in each case, as viewed in the peculiar light of the country involved. They follow certain guiding principles in their method of selection and of treatment. As is inevitable in a period of crisis, they are principles largely deduced from personal experience and observation ; and are therefore subject to correction and capable of development.

Guiding Principles regarding the Continental Educational Crisis

The *material aspect* of the Continental educational crisis is the least important. If, to-day, every country were to increase its educational budget, if attendance at school were extended by one to two years, and all former students and pupils were placed in promising positions, the crisis might be alleviated, but it would not be removed.

The Danger of Education based solely on Intellect

The extending of State-organised school education has, in the majority of countries, *not enhanced but lessened the active, intellectually-creative qualities of youth.* Respect for moral laws and forces has declined. With the accumulation of knowledge the vital dynamic force of youth has diminished. The young people know more but can do less. They have great ideas and expectations, but what they accomplish does not increase in proportion. They are often weary of school. When they go out into life they take with them no thirst for knowledge or desire for further study. They become an easy prey to slogans, and rely on examination certificates. They expect more from others than from themselves. They can write articles, but cannot make tools.

These features describe the symptoms of a prevalent disease. That many are not as yet infected with the disease is no proof of its non-existence. In some countries a turn for the better has already set in.

The idea that man and his world can be illumined by appealing exclusively to the *intellect* was already proved wrong in the schools of the past. In many cases it did not even lead to an increase in the power of memory.

We are approaching a new conception of the nature of man, in which the intellect is ranged side by side with the will, the character, and the unconscious creative forces. The teaching-school on the Continent is still largely bound to the old conceptions, while in England the new conception has for decades been widely disseminated by great pioneers.

In the external structure, the weakest point is the school examination.

Teachers complain that its pressure crushes the unity and vitality of study. Parents and young people doubt whether it is even a reliable criterion. It may perhaps serve to measure knowledge in terms of quantity, but it is no criterion of creative power.

The movement to replace the examination based on memory by better methods is still in its infancy on the Continent. But educational systems based upon examinations have a difficult time ahead of them.

The School in Relation to Social Life

In many instances, the school, as the last of the old educational forces, is struggling desperately against growing isolation. Formerly, it derived support from the educational groups consisting of handicraft training, the parental home and the religious community. In most cases, these groups are on the decline as effective educational forces, and to a great extent they have already been destroyed.

During the period of " enlightenment," it was believed that the primitive conditions of *paradise* would come of themselves if the traditional educative forces of the past were released. To-day we know that Nature creates wildernesses and primæval forests as soon as the controlling hand of man is withdrawn. The school frequently finds itself surrounded by such wildernesses.

For a long time, the school believed that it could easily replace the influence of the home, the religious community and handicraft teaching. The belief in this inclusive educational function of the school is losing ground. To-day it is realised that this function can only be effective under the conditions of an old tradition, within a complete community of life of children and educators ; conditions which are seldom encountered on the Continent.

The mass school of the city does not possess sufficient means to solve this problem.

Besides the school, non-political or political youth movements, the parties and the State itself, have attempted to fill in this gap. Wherever this attempt has been made, awakening doubt and even a tendency to retrogression are now discernible. The family is being rediscovered and fostered. The beginnings of a true intellectual discipline and of genuine religious emotion and experience are becoming manifest, even where the thread of tradition had been broken and the actual trend of education was in the opposite direction. In the domain of manual training, also, there is a tendency to depart more and more from the artificiality of the school workshop, and towards a greater appreciation of genuine handicraft or active handwork. It is a well-known fact that in many respects a business run on industrial lines is better able to observe and teach certain rules than the best school workshop.

This need not imply a reactionary return to a new edition of the Middle Ages. On the contrary, we may say that here, too, the line is bending back from the abstract to the concrete, from theory to actual practice.

Study and Experience are too widely Divergent

It is found that a new passion for study frequently develops as soon as the human being ripens, as the result of experience of life or even thorough manual skill. Here again, school workshops are frequently incapable of providing this. Handwork cannot easily be confined to a specified number of minutes like any other school subject; longer periods are more effective.

This danger can best be obviated by that form of study which is accompanied by genuine handwork, or by occupational work, and which is organically and alternatingly bound up with the latter.

A number of institutions have discovered this new method. Here is the point at which future leisure opens up incalculable possibilities. The process of learning can be reorganised. It need not be compressed into the few years of youth. It can be arranged side by side with life action instead of being artificially separated from it.

The Desire of Youth for a New Ideal

The schools are not yet adequately equipped to undertake this new task, any more than they are for the extension of the period of attendance at school which is everywhere being discussed. In this, too, the schools still think too much on the lines handed down by tradition. They pay too little attention to the change in the attitude of youth, and to social and technical conditions which are changing day by day. They are in process of slowly adapting their orientation to these conditions; but, so far, in the "Leisure" movement on the Continent, they have allowed other movements connected with sports, military life or touring to gain a lead.

Youth craves enthusiasm and devotion to a great aim or ideal. Anyone who makes the right demand from youth finds it ready for any service and any sacrifice. Good work in school and examination results, or prospects of better posts in life alone, no longer satisfy this craving: such values are losing their attraction. Youth itself embodies the vision of a freer, more human future. It is becoming more and more willing to throw itself wholeheartedly into the task of securing it.

It is winning for itself a form of education more consonant with that vision.

The Rise of a New Esprit de Corps

A new *esprit de corps* is awakening. Trained bodies are now a commonplace among young people of both sexes. They have evolved their own rules of discipline and clothing. The simplicity of open-air life and of camping is spreading. Principles of self-control, of harmony and æsthetics, are penetrating deeper. There are even signs of a new hunger for artistic action and intellectual exercise. It is now realised that beauty and upright carriage are not the final aim.

In the sphere of the subconscious, the effects of the " new education," as it appeals to the ideals of humanity, are making themselves felt in the masses of youth. The inner basic attitude is changing ; it is no longer pessimistic, cynical, contemptuous of the world. The spirit of revolt is disappearing, its place is being taken by self-discipline. The beginnings of reverence, of readiness to serve, of respect for the freedom of others, are becoming perceptible. The climate of the soul is growing sunnier. And in this respect the pressure of economic and social distress has greatly helped education.

Seldom has the art of education been confronted with a greater task, or more favourable conditions for its accomplishment.

Girls, above all, have stood with distinction the test of equality and of entry into the full sphere of learning and life. A new type of young woman is being evolved, which, in turn, is leading young men toward new stages of development.

Growth of a New Set of Values

Still greater importance is in process of attachment to so-called *technical education.*

The modern age needs nothing so much as first-class specialists for the creation, maintenance and operation of tools, machinery, engines, aircraft, power stations and other industrial units of production. Their ability must be based on skilled manual training. If they are afforded wide possibilities of advancement within the scope of their occupation, and if they are given leisure for harmonious training in other departments, a new type will be produced, at once creative and objectively skilled. Such a type must far exceed in importance the intellectually-trained, " blackcoated " worker. And technical education is now equipping itself for this task.

A revulsion from intellectualism, via anti-intellectualism, to the appreciation of genuine autonomous reasoning powers, is becoming perceptible.

It is being discovered that mentality, character and will-power are valuable bases of the human being ; but that by themselves alone they cannot accomplish the great tasks of to-day. These values will, again, like a crystal, group themselves about the centre of a genuine reasoning power. A sharp distinction will then again be drawn between the true and the false, the genuine and the spurious, the human and the non-human.

Neither those possessed of encyclopædic knowledge, nor those strong in character but devoid of reasoning power, have this capacity. The type of the " hero " will once again have to be that of the able and clear thinker. With the restoration of the dignity of thought will return also the conceptions of freedom and liberty to their right values. They seem to rise from the night of to-day like stars announcing a new dawn.

CHAPTER TWO

THE UNIVERSITÉ DU TRAVAIL AT CHARLEROI

IN the *Université du Travail*, Belgium possesses an outstanding example of an educational establishment representing the heart and brain of the economic life of an entire Province. This Province of Hainaut is one of the most highly developed industrial areas on the Continent.

Every day the passenger services and the railway bring 4,000 students to the University from more than 300 communes of the Province and the surrounding districts of Charleroi. The fares charged are low; in fact, cheapness is one of the Institute's axioms. Every stage of the curriculum provided by the Institute is to be made accessible to all, but the students are expected to bear as great a proportion of the costs as possible, in order to avoid an excessive charge on the official budget.

Financial Facilities for Students' Training

The buildings, workshops, machinery and apparatus are the best obtainable. Everything which the students pay for themselves is primitive, but of adequate quality. The students who attend the school during the daytime have their meals in a model restaurant, attendance at which is obligatory for certain classes ; the administration of the restaurant is in the hands of the students' own co-operative society, only the actual cost of the food being charged ; these prices are astonishingly low. The quality of the food, which is controlled by the members of the co-operative society themselves, is good. A students' hostel is run on the same lines and is intended for students living at a distance of more than 15 km. from the school. The only charge made here is for laundry, everything else being done by the students themselves. This system reduces the cost of living to such an extent that it is possible to provide full board and lodging for a whole week, comprising four meals a day, for about 60–70 Belgian francs (about 10*s*.). Students who are without means can even obtain a reduction on these charges. A swimming bath, gymnasium and games room are provided for the students free of charge. Thus everything necessary for the material needs of community life is arranged on exemplary lines at extremely low cost. Students can obtain accommodation in the hostel according to their standards of study, so that it forms also a social centre ; and to belong to it acts as a great stimulant. The daily routine is strictly controlled. The institution furnishes a remarkable example of what the co-operative idea is capable of achieving in the sphere of education.

The Aim of the University

The task of the *Université du Travail* is to train the new generation of workers, shop and factory foremen, technicians and engineers for the entire Province in one single institution. But this is only one-half of its task. The *Université du Travail* remains for its students throughout their working life a vital centre point, a standard to which they can refer their work, a source of information on scientific and technical points, and of research into all the problems, simple or complicated, which their work entails. Finally, the groups of former students remain in active and productive fellowship.

To the layman, the idea of a technical education is usually associated with lifeless tools and abstract tables. He has a picture of craftsmen being trained as though they were mere extensions of machines. Any connection between spiritual life and technical training does not at once leap to the eye. Utility would appear the predominant idea in the entire process of technical training. Hence the assumption that a fundamental all-round education is still best obtainable in the older universities. The "classical" schools are still regarded as the best and highest form of schooling, compared with which a technical education seems somewhat second rate.

Technical Education and the Humanities

This idea is definitely wrong. The serious observer must soon discover what powerful and basic human educational values are present, in the structure of technical education, and in its methods, teachers and responsible heads. The *Université du Travail* demonstrates that a technical education is capable in itself of forming and developing the whole man. It does credit to its motto: "Vers les humanités ouvrières" (Towards cultured workers). And this motto has a twofold meaning, for *Humanité* has the same double meaning as the English word humanity; it is symbolic also of the classical instruction given in the old Belgian secondary schools. A conscious attempt is made to enable working men and women to develop their human activity in their work, through their work and for their work. It is the formation of character which is sought, and the use of tools and machines can all be made contributory to the instilling of accuracy, reliability and endurance. In its educational scope the *Université du Travail* may be considered on a par with any equivalent institution.

Proof of this is furnished by Circular No. 418.

It is impressed upon the professors that example is the best way of gaining authority, an authority which must be based on that of a "bon père du famille." The professors "speak correctly and politely, and in doing so contribute towards instilling good breeding into the pupils." Regularity, order, good manners and mutual respect are qualities which the professors encourage. They respect the personality of the students; they instruct them in what constitutes freedom, for themselves and others, and how they may become a working élite. Obedience is insisted upon, as the best method of learning how to give orders.

Regulations of the University

The director, professors, officials, pupils and workers alike all observe the regulations. The learning of submission to the rules is a necessary preparation for subsequent adaptation to the discipline of industry.

Thus, students residing in the hostel rise at 6.30 a.m., study from 7 to 8, breakfast to 8.15, recreation to 8.40, followed by classes until 12 o'clock; and so on throughout the day. Every minute until 8.30 in the evening is regulated. Outside students travel by specified trains, they leave for the stations in groups in charge of a group-leader, and the streets through which they may pass to and from the station are specified. The students assemble just before the hour appointed for the lessons at the door of the classroom or workshop, the teacher opens the door, and is the first to enter the room and the last to leave it. Twice a day there is a roll-call of students. The students are, of course, responsible for their tools, machines and classrooms. "At the table," the regulations continue, "students must be well-mannered and orderly; they must observe the following advice: Conversation should be carried on in a well-modulated voice and only between students sitting at one and the same table. Soup must not be eaten noisily, do not blow on hot soup. The meat is to be handed round by one of the students at each table, who serves himself last. Do not gesticulate with knife and fork. Do not drink with your mouth full. Those who have never learned how to behave themselves at the table find this lack a source of embarrassment."

The Value of Discipline

What has this to do with the conception "technical education"? A great deal, since an attempt is being made to train not only the technician but the man. It is not enough to use tools properly and, for the rest, to be ill-mannered in the workshop, at home or with strangers. If the school succeeds in solving this problem, and in dealing with the whole personality of the worker, it will do much.

The fact that these rules have been taken from the regulations of the *Ecole nationale professionnelle de France* shows that these matters are also receiving attention in France.

Such a disciplined education is usually only associated with a Fascist régime. The *Université du Travail* has been founded and is being carried on by a Socialist Province.

We may note that the discipline built upon this basis is scarcely ever resisted. The severest punishment only means a few days' suspension. When this punishment is imposed, a big E (*exclus*) is placed against the student's name, and no professor is allowed to give him instruction until he produces a written authorisation from the chief of the service.

The Use of Posters

The moral training is not confined to the observance of these axioms of community life. For example, it makes use of posters.

Everywhere " Tables of Maxims " are placed, over which is the motto : " Don't shout any more, the tables of maxims are more intelligent and ten times more human, a hundred times more effective." The following are a few of these silent teachers :

> " A place for everything and everything in its place."
> " A time for everything and everything at its proper time."
> " Dirty machines are only good for dirty people."
> " From the top to bottom of the social scale example is the finest form of authority."
> " Accuracy is the first quality of a responsible worker."
> " Be brief; your minutes are as valuable as ours."
> " Never say : I will do it to-morrow ; do it now."
> " Be kind to animals, who cannot complain for themselves."
> " Develop initiative, perfect your abilities, and you will double your value."
> " The irresolute lose half of their life, the resolute double it."
> " Our solution for all : maximum production in the minimum of time for the maximum wage."
> " What time is it ? A badly spent day seems long, a well-spent day short."

In addition, on the glass panes of the doors and other places visible from a distance are placed large printed posters issued by the *Université du Travail* itself. Here are a few of them :

> " Do not walk with your head down. You must raise your eyes to see your way."
> " To be fruitful, culture must be based on experience of life."
> " We are in a century of transition between irksome toil and the possibility of enjoying the pleasures of existence."
> " Silence ! Nothing is more unpleasant for those who are working than to be disturbed by people who have nothing to do."
> " Never judge a man by his mistakes ; always judge his good points first."
> " He who learns methodically firmly retains what he has learnt."
> " A bad character is due to an excited irritability, which stupid pride or the inability to understand, converts into the rebellion of self-satisfaction."
> " Work and hope ! This is the great rule for those who deal with big things : to refuse to allow the mediocre the right to deflect them from their purpose."
> " Nothing can be more harmful to a human being than the man himself."
> " If you want people to think well of you, do not talk about it."
> " Talking is sowing, listening is absorbing."
> " The leaders must possess the strength of their responsibility. This can only be achieved by an invincible strength of character which is more often lacking in public men than intelligence."
> " Never say : that is impossible. Try it."
> " Be frank and look people in the face when you talk to them."

" Let us be charitable even to those who are not charitable to us."

" The motive alone decides the value of human actions."

" We must earn praise and flee from it."

" Storms harden character."

" True progress consists in self-renewal."

" A trade is an insurance against want."

" There is no greater joy than making others happy."

" To be only good to oneself is to be good to no one."

" Steadfast devotion to the duties of everyday life is often the finest form of heroism."

" The superior man identifies himself with events and circumstances, in order to control them."

The list of the authors of these mottoes includes names such as Seneca, Vinet, Fenelon, Clemenceau, Confucius, Pascal, Renan, Leibniz, Ford, Mussolini, Cousin, Amiel, Duclos, Molière, Balzac, Georges Sand, Voltaire, Buxton, Tolstoy, Victor Hugo.

Many of the mottoes bear no name, and these are often the most apposite. The students know that these originate from the Director and the professors themselves.

Assessing the Value of Posters

Such a method may become ridiculous and repellent if it is not felt to be in keeping with the spirit of the undertaking.

An observer will be convinced that this is not the case with the *Université du Travail.* Everyone, from the Head Director, M. Hiernaux, an outstanding pedagogue of world-wide reputation, who in 1934 was the Belgian Minister of Education, down to the professors, teachers, work-masters and workers, are concerned by their untiring work, their self-control and their courtesy, to show the students by their own example the value of submission to the moral laws and rules.

When, in such an atmosphere, we read over a lathe, or in a storeroom, or on the door of a room some saying of Tolstoy or Confucius, we remember how much has been achieved in business life and in party politics during the last few decades by this constant repetition of slogans, assertions and maxims. To-day the method is even being adopted of using gramophone records, to influence character by recurring suggestion.

It means a readjustment of our ideas to realise that external moral truths can not only be imparted in churches and in moral training, but also by posters. In this way they are even more easily inculcated. What makes such a practice ridiculous in many places is not the form of the poster, but the contradiction between it and the circumstances of its surroundings. When exhibited in an environment in harmony with its maxims, it is respected ; and this in places where it would have been formerly thought impossible.

A technical training establishment of the standing of the *Université du Travail* is eminently suitable for achieving such effects. If the future workers, tradesmen, foremen and engineers of an entire district are to be educated, a human resistance to the effects of mechanisation must be very strongly stimulated.

Special Facilities of the University

Naturally, this is only conceivable with the aid of an exemplary technical apparatus. The technical apparatus at the *Université du Travail* is exemplary. The classrooms, laboratories, training rooms and workshops cover an area of more than twelve acres. All the existing buildings are admirably equipped, and a large new central building is under construction. The workshops and machine rooms are even highly impressive ; the machine room in the metal-working department is more than 160 yards long, whilst two other workshops are more than 50 yards long.

From early morning till late at night these workshops and machine rooms are in full operation. They contain every conceivable machine for working metal and wood. The workers are continuously changing. In the morning the younger students under 15 years attend, and in the evening the older students, consisting of both young and old men, who hasten to the school when they finish work at the factory, have their meal in the co-operative dining-hall, and then proceed with their training. The same picture is afforded by the laboratories, by the metal-testing department and by the lecture rooms.

Importance of the Evening Classes

Particularly noticeable in the University are its evening classes. In 1933–4, 1,234 students enrolled for evening classes, as against 1,212 the year before. At the end of the year their number was still 80 per cent. of the initial number, as against 70 per cent. the previous year. This shows that these courses are still popular in spite of the economic crisis. They are the means by which men and women in professional life from the entire Province make good what they have missed at school, increase their efficiency and broaden their culture. If one passes through the lecture rooms during the evening, one finds classes in all the important commercial languages, English, German, Italian and Spanish. A lecture on political economy or a lecture on philosophy can be heard ; for all school and university subjects are represented, provided they are of a technical or general cultural character. The keenness and attentiveness of these workers, employees and technicians is conspicuous. 29·9 per cent. of the students complete the course every year by taking the specified diploma, whilst a considerable number of students complete courses which cover several years.

In this connection we may note another important feature. During the afternoons and evenings, instruction is given not only by professors, but also by men and women who during the day are engaged in other professions. For example, one of the heads of the central statistical department of the Province teaches political economy, while an industrialist teaches mechanics, and so on. This enlarges greatly the scope of the University—which already numbers 350 professors and lecturers, and it also serves another purpose. It imparts to the teaching a background of living experience and reality, and keeps successful professional men and women in constant touch with the keen elements of the oncoming generation.

Facilities for Young Students

At the other end of the scale the University commences with 12-year-old students. The 100 boys and girls under 14 years of age who attend the preparatory section of the day trade school are undoubtedly the youngest members of a " University " in the world, an honour they fully appreciate! Judged by outward impressions, the *Université du Travail* has certainly succeeded in awakening a wholesome pride in all its members, though many of these young folk have often come from the most poverty-stricken conditions. And one does not, on the other hand, encounter that shallow superciliousness which so frequently appears when young people from these conditions are introduced to semi-scientific conditions, without an equivalent development of character. Handwork helps towards avoiding this danger. Side by side with the regular curriculum of the higher elementary school classes, these 12–14-year-old pupils are given an opportunity of working for several weeks in the different workshops. They show great keenness, and the danger of over-exertion is guarded against. Under these conditions handwork would seem to have no harmful consequences, even for these very young boys. On the contrary, it seems to help, both as regards physical development, and more especially in the selection of a trade.

The entire institution has been built up on the lines of a productive industrial undertaking, so that the children move at once into the atmosphere of a works employing its own workers, among highly skilled professionals and with fully-trained teachers. Those who have seen many school workshops will appreciate how difficult it is for a school workshop to create this atmosphere of serious reality during the few hours allotted to the subject every week.

The Trade School

Attendance at the Trade School proper can commence between the ages of 13 and 14. It numbers more than 1,000 students. Out of the forty-eight hours a week, twenty-four are devoted to handwork in the institution workshops, six hours to drawing, and four hours to physical training. The remaining time is reserved for such subjects as French, arithmetic, algebra, chemistry and technology. Even at this early stage the pupils begin to choose the path which will lead to a trade. The first parting of the ways takes place at the end of the first year.

The less skilled students then start attending the *section profes-*

sionnelle (trades section). Three-fourths of the instruction is thenceforward devoted to workshop practice, the remaining time being occupied with general subjects.

The Industrial Section

The more gifted pupils then enter the "industrial section," where half the school hours are devoted to theoretical instruction.

The second separation takes place at the end of the second year; the best students from the industrial section then sit for an examination with a view to entering a special department. In this for three years three-fourths of the time is devoted to theoretical studies. From here it is possible to enter the next higher grade, the preparatory section of the special school for technical engineers.

At the end of the third year, the successful students obtain their diploma for practical life as fully-trained handworkers, turners, smiths, machine-tool workers, electricians, etc.

Three Further Possibilities for Students

In addition, three other possibilities are open to students who have obtained their diploma in the industrial section and the special section:

(*a*) One year for perfecting their studies. During this, five months are spent in a construction office, and five months in a workshop where tools are made. At the end of this year they obtain, for example, the higher-grade handworker's diploma as tool makers.

(*b*) The second possibility is to enter a normal secondary school, the special school for technical engineers. This school was established pursuant to the Royal Decree of 1934, and takes students of about 15 or 16 years of age from the middle-grade schools, the corresponding class of the old higher-grade schools (colleges) and from the special courses referred to above.

This gives them two years' preparatory training for the examination which leads to a higher-grade course lasting three years.

Throughout the whole five years, the instruction consists of forty-two hours a week, one-third of which is devoted to practical work in laboratories and workshops, and the remaining two-thirds to purely theoretical scientific work.

The Title of "Technical Engineer"

Finally—that is, between the ages of 20 and 22—the students are awarded the title, created by Government Decree, of Technical Engineer. This title is equivalent to the final diploma of the French school of arts and crafts and gives an entry to certain specific university studies. The right to a complete university course has not yet been achieved; it would seem that this is still opposed by other secondary schools, and more especially by the university-trained engineers.

(*c*) The third possibility is to enter the higher-grade industrial school, a secondary school which, side by side with the professional work, devotes eleven hours a week in the evenings to courses in mechanics and electricity, occupying four years, three-year courses in mining engineering, and two-year courses in higher grade machine tool practice. Here again the instruction is given by professors of the *Université du Travail*, and corresponds in many respects to the strictly scientific university training, except that it is more concentrated on special subjects. The diploma obtained on completion of this course is that of a certified technician.

Temporary Finishing Courses

Another section is the so-called temporary finishing courses (*cours temporaires de perfectionnement*), intended for training technicians for aviation, radio construction, foundry practice and similar specialised professions. Its principal task is to make men who have long practical experience in handwork thoroughly acquainted with scientific works and periodicals.

A further section, again, provides commercial training for business, professions, secretarial work and salesmanship ; and finally mention should be made of a somewhat smaller section for the decorative arts.

The Training of Teaching Staff

The final section serves for the training of teaching staff for technical instruction, in which professors of technical subjects and so-called apprentice masters are trained.

The professors spend the first year at various technical schools, not only in Charleroi. The second year is devoted to special courses in Charleroi which deal more especially with pedagogic questions.

Apprentice Masters

The apprentice masters must have been engaged for at least five years in the practical training of apprentices. In order to be admitted, they are required to execute a very difficult piece of handwork without assistance, undergo a teaching test, and furnish proof of a degree of scientific knowledge.

After passing these tests, they spend twelve months side by side with experienced apprentice masters, who initiate them into the practice and theory of the art of training apprentices. In addition, they have also to attend a number of lectures on theory.

The Wide Scope of the University

The multiple nature of these courses may at first sight seem confusing even to an expert. The ramifications of the curriculum of the *Université du Travail* are like the roots of a big tree.

If we analyse these different courses of training, and relate them with the actual life of this district, we find that provision has been made for every branch of endeavour below that of a leading university-trained engineer. The many-sided nature of the curriculum corresponds exactly to the ramifications of the social structure. We are certain, therefore, that the *Université du Travail* is not tackling its problems from the theoretical aspect alone, but that it has succeeded in achieving a sound association with reality.

This adaptation to the needs of the economic life of the Province finds its expression in many other ways.

Library Facilities

A splendid library containing more than 30,000 volumes is at the disposal of students of all grades, from the 12-year-old pupils to the oldest students attending the evening classes. From the age of 12 years onwards, the students are systematically encouraged to make use of this library, and even the professors are reminded how important and useful it is to keep themselves constantly up-to-date with the aid of the library. In 1934–5, the library was used 64,466 times. A list is given below in which these figures are analysed :

DETAILS OF USE OF THE LIBRARY

DESCRIPTION	NUMBER OF PROFESSORS AND PUPILS 1934–5	NUMBER OF VOLUMES ISSUED IN UNITS OF 100	TOTAL
Professors	275	1,675	4,608
A. Higher Industrial School .	563	1,897	10,682
B. Day Trade School . .	1,080	651	6,833
C. Evening Trade School .	1,234	303	3,740
D. Special School for Technical Engineers . . .	257	5,051	12,983
Other Sections . . .	459	224	7,970
Miscellaneous . . .	—	—	17,650

USE OF LIBRARY ACCORDING TO SUBJECTS

DESCRIPTION OF SECTION	NUMBER OF VOLUMES USED	RATIO ACCORDING TO INDEX	NUMBER OF VOLUMES IN LIBRARY	RATIO ACCORDING TO INDEX
Works on General Subjects	3,978	6·17	2,932	7·66
Philosophy-Religion .	1,103	1·71	1,059	2·76
Sciences—Social Law .	3,406	5·28	7,354	19·21
Philology . . .	1,064	1·65	674	1·76
Pure Sciences . .	13,681	21·22	4,986	13·02
Applied Sciences . .	21,134	32·78	11,339	29·62
Fine Arts	1,670	2·59	1,581	4·13
Literature . . .	12,308	19·09	5,654	14·77
History-Geography .	6,122	9·49	2,690	6·90
TOTAL : .	64,466		38,270	

On entering the large library, one becomes aware how zealously this treasure of books is being used. More than 100 trade periodicals published in Belgium and other countries are regularly taken. The most important articles and reports, as also the latest books, are at the disposal of all interested students, former students and industrialists in the Province, selected by a special documentation and bibliography department. An exemplary scientific apparatus to make these articles and books known has been built up in this way. Another excellent feature is the completeness with which all necessary subjects for the work are represented. Other spheres of knowledge are often less happily treated by their supporting libraries.

The University Magazine

A similar purpose is served by the magazine of the *Université du Travail*, published twelve times a year. It is full of interesting articles dealing with the development of technique and technical education. In addition it contains innumerable illustrations, diagrams, tables, details of the most important new inventions, discoveries and methods, and finally regular reports relating to diplomas and other successes attained by students. This periodical is also the official organ of the great organisations of former students. An effort is made to encourage all former students to join these permanent associations. The magazine, which contains more than 1,000 pages a year, is sold for 20 Belgian francs (about 3*s*. 6*d*.).[1]

An equally important feature is the *Services des Autographies* (manifolding service) which compiles an outline of the lectures and courses. It is divided up according to key-words, but is extremely detailed. More than 200 of these outlines, dealing with all subjects connected with studies and work, are available to students. Judging from specimens taken at random, they are exhaustive, systematic and informative, and cannot fail to facilitate the task of preserving in permanent form the most important data and ideas of the training.[2]

This does not by any means exhaust the functions of the *Université du Travail.* It is always available for any former student, for any economic undertaking, for furnishing information, and for carrying out tests. In one year its laboratories carried out more than 5,000 such tests.

Some Conclusions

In conclusion, we must revert from the purely technical aspect to the human aspect. One of the most important criteria in judging of the serious nature and the vitality of an institution is whether it maintains constant touch with former students and pupils. In so far as the *Université du Travail* is concerned, this is being done highly successfully. Former students and pupils are affiliated in three main groups. Each such association is self-administrative, and is divided into regional sub-groups. The primary task is the continuation of the training and education, and the meetings are devoted first and foremost to that end. Like the meetings of learned societies, they issue reports and statements on all important problems. In addition they organise festivities, excursions and tours, and find positions for their members. At the big annual meetings, which are attended by the heads of the local authorities, the members read scientific reports. Large groups also pay regular visits to the Alma Mater, the *Université du Travail.* Its directors and professors are considered still to occupy their positions as the " fathers of the family," a conception on which is based the moral code which we have described above.

---

[1] "*Vers les humanités ouvrières,*" *Bulletin de l'Enseignement Technique du Hainaut*. Publication mensuelle. Abonnement, fr. belg. 20.

[2] Par exemple, "*Université du Travail, Charleroi,*" *Education sociale*, pour Jean Tourneur, 1935.

Thus the *Université du Travail* permeates the entire Province. Its auxiliaries are education and self-education. It embraces all scientific and technical problems, instruction on all important questions, and the creation of a moral community. Out of its more abstract and technical processes there has grown something that may be called a new " mystic of mutual endeavour," a warmer human atmosphere. This is maintained by the final but perhaps the most important feature of the entire structure.

Development of the Full Individual

Within the scope of the technical work, and so far as is possible under existing social conditions, each individual, as we have said, is given the opportunity of developing capabilities to their maximum limit, and of finding the position in life best suited for him. This possibility, however, of climbing a step higher is not limited to success at certain moments in a particular examination, nor is it confined to this or that year of training. The possibility is given again and again, year after year, although it may be in modified or less obvious form. It is often too late for late-developing talent to prove itself and to gain public recognition in the average examination system. Here the chance comes back anew, again and again. Efficiency, further, is not estimated upon successes in an abstract sphere, but upon the concrete values of handwork, of technical ability and of scientific knowledge as evidenced by research.

Diplomas and Certificates

We may take different views as to the value of the system of graduated diplomas. But there can be no doubt that in the mind of the Franco-Belgian race they have obtained very general recognition and a very particular significance.

Since it was established thirty years ago, the *Université du Travail* has awarded 11,797 diplomas. They represent the public acknowledgment of the high standard of efficiency in the mixed curriculum of mechanical and scientific work.

Of these certificates 1,750 were awarded in the higher scientific grade, 2,918 in the day trade school, 3,414 in the evening trade school and 1,426 in the training school for trade teachers. The two highest honours are "the highest distinction," and "high distinction." If we couple the courses of training together into homogeneous groups, and arrange these two grades accordantly, we arrive at the following results :

	HIGHEST DISTINCTION PERCENTAGE	HIGH DISTINCTION PERCENTAGE
Full Day Courses :		
Technical Engineers .	0	30
Day Trade School .	5	35
Full Evening Courses :		
Higher Industrial .	12	42
Evening Trade School .	12·7	40

This table shows the far greater proportion of successes in the highest-grade examinations obtained by the evening classes to those gained by the day classes. The same difference appears in the next higher grade. We must also bear in mind that, before they begin their studies, these evening students have already done eight hours' hard work at their respective trades, and that they have had often to travel long distances, and are frequently living under the most primitive conditions of life. In spite of this, not individuals only, but large numbers succeed in reaching this high standard of efficiency. If we are to appreciate their achievement, as "heroes of work and study," we might deservedly concede them the title of an "élite" among workers. And the founders of such an institution, in any comparison of school systems, might equally be considered to have earned the "highest distinction."

Bibliography

The literature of and about the *Université du Travail* is very large There is a very instructive annual report : *Rapport de la Direction Université du Travail, Charleroi.* There is a most valuable pamphlet describing the whole structure of the *Université du Travail* to the families and young people with the title : *Parents ! Jeunes Gens !* Other books are : Raoul Grandmaître, *Les Problèmes de l'Enseignement Techniques Belge, Charleroi* ; M. Germeau, *Les Conseils d'Orientation dans l'Enseignement industriel.* There are, furthermore, many scientific publications, like : Grandmaître-Brison, *L'Expérimentation en Résistance des Matériaux.*

CHAPTER THREE

SCHEME FOR AIDING TALENTED PUPILS IN BELGIUM

Aims of the Movement

> " Fullness of living and the joy of life abound wherever just and wise laws are observed under an enlightened Government. Wherein those in authority contemn wisdom and justice or rapacious rulers despise them, decay and ruin ensue. These are the teachings of the past.
>
> " These are the teachings which inspired the promoters and friends of the work for gifted students (*Fonds des Mieux Doués*). They desire to see that high positions are held by men and women, whether they be the sons of kings or the children of the poor—in whom a high moral integrity and a clear intelligence are united with real knowledge and tenacious energy. Their object is not more indulgent methods of selection, but a competition that shall be open to all, poor and rich . . . Inspired by a deep-rooted consciousness of equality and by a social sense, they wish to provide equal possibilities for all children. Their dream is of no chimerical equality . . . they desire to afford to every one an equal chance of developing his innate abilities. Even if this be not the means of killing envy, it is at least a sure means of rendering it unjustified . . . I, for my part, believe in the value of the Elite."

WITH these words Raoul Grandmaître describes [1] the aims of the movement for the Aiding of Talented Students in Belgium. He is the Head of the Higher-grade School Department of the *Université du Travail* at Charleroi. They might be the words of a Platonist. Grandmaître is an engineer ; but he is one of those engineers and technicians who no longer conceive of the world of ideas as distinct from the world of material laws and problems.

Whereas England has never fully suffered from the growing divorce between " idea " and " reality," it has existed on the Continent for years, and is only now slowly dissipating. Engineers and technicians—especially those connected with technical education—and abstract physicists are again becoming practical " idealists." Grandmaître is no longer out of place in quoting Plato's indignation that men should be placed at the head of public affairs who were lacking in understanding and education, or in coming to the following conclusion : " We should show less mistrust of scholars and wise men, we should do everything to secure that public affairs are entrusted to the best."

To achieve that object is, briefly, the purpose of the work of the Belgian " *Action en faveur des Mieux Doués* " (Movement in favour of the Most Gifted), which had its inception in a Law promulgated on October 15th, 1921, and was improved after five years' experience, bv a second Law of May 25th, 1927.

---

[1] Raoul Grandmaître, *L'Action en faveur des Mieux Doués.* Collection " Province de Hainault," Charleroi, 1933.

Effect of the World War

As in many other spheres on the Continent, the World War had served to accelerate the movement. The Belgian laws contain a citation which reveals the passionate struggle for justice with which the war generation was embued. " Why should there be inequality in education and culture ? . . . Why this injustice, why should higher education be almost barred to us ? Why is higher culture practically forbidden for the poor and needy, the children of the working classes ? " These words are those of Charles Peguy, a passionate champion of French youth, who fell in the war. Peguy himself rose from poverty, and is a shining example of his own doctrine. The man who " discovered " him, Edouard Herriot, a fervent champion of the movement, is also cited : " The freer a people becomes, the more it desires to remove the barriers of birth, and the barriers of fortune, and the more it needs to build up its public institutions on the basis of a strict selection. I want no concessions to the spirit of idleness and reduced effort. I do not in any way wish to sacrifice a man who belongs to the élite to one who is mediocre, in order that the charity of selection be assured to the children of the simplest classes. I see the watchword of the future of our democracy and our education in this combination of two ideas : the equality of the classes in education, and the selection according to merit."

The young group of French teachers, former ex-service men, known as Les Compagnons, is also cited : " The Fatherland has the right to utilise to the full all the spiritual wealth which it possesses. A country which desires intellectual and energetic citizens must give to each the possibility of self-development. All must produce, but the best must govern in the interests of all. Justice demands that no single force shall be wasted or led astray. The national interest demands that abilities be utilised to the utmost limit and be given the chance to reach fruitation."

Finally there is cited, as a distinguished witness, the former British Minister for Education, Mr. H. A. L. Fisher, who stated in 1917 that the creator, the inventor, the man of action, and the coming leader still unconscious of his own abilities, must find in the school the environment most favourable to his development ; and that a national system of education must be built up, with a width and freedom that shall bring talent and gifts to full fruition.

The seed lying dormant in these words fell on fertile soil in Belgium. The Law which created " *Le Fonds des Mieux Doués* " was passed on October 15th, 1921. It provided that each community or association representing several communities should create an independent fund, in order to give children of exceptional abilities, and without means, the possibility of continuing their studies on leaving the elementary school.

Important Changes in 1927

After five years' experience two fundamental changes were made in the Law, on June 25th, 1927. Under the ægis of the first Law, 167 independent funds had been created; 38 local funds for communities of between 20,000 and 300,000 inhabitants, 120 intercommunal funds for each 20–40,000 inhabitants, and 9 provincial funds for approximately each 50,000 inhabitants. These 167 funds, involving 172 committees with more than 700 members, were found unable to work on uniform lines. Further, it was found that the original Law was too narrow in scope: it had confined assistance to children of exceptionally high abilities. This conception was interpreted in many different ways; and in those districts which interpreted it conscientiously, it impeded the work. In 1927 it was decided to amend the Law, the fundamental idea being replaced by a more modest one. In future the funds were to be used for assisting children who were in any way specially gifted. The number of independent funds was reduced from 169 to 79, by amalgamating the 129 inter-communal funds into 41.

It is on the basis of this Law that the funds have since been administered.

Organisation of Available Funds

In connection with each fund a Selection Committee is appointed, and in the case of the larger funds, several committees. Their work is entirely of an honorary nature; only their out-of-pocket expenses are refunded on the scale provided for officials. Each committee consists of five members. It includes one doctor, whose task is not confined to the health and mentality of the applicant; he is required to collaborate in all matters, even pedagogic questions. It was rightly assumed that no one acquires more human understanding and more social experience than an experienced doctor.

The four remaining members are selected so that the interests of the State schools and of the free schools are equally represented. Nearly all the free schools in Belgium are Catholic schools. The political tendency of the majority of the State schools inclines towards the left, and in any case they are not under ecclesiastical control. For that reason it was subsequently provided by Government Decree that there should be two representatives of the Right and two of the Left, in order to obviate any political bias. Thus we have an interesting example of the attempt to raise education out of the field of party politics.

Three members out of the five are appointed by the Communal or Provincial Association, two by the King. They hold office for three years, and are all eligible for re-election.

As a rule the four members, in addition to the doctor, are teachers. This is not essential, but these members must represent the interests of the different types of schools.

The work of the Committee consists in making the selections, in eliminating unsuitable applicants, and in assisting suitable candidates according to the available funds and requirements. Any savings effected are carried forward to the next year. With the permission of the authorities, allotments can be made from the next year's funds.

In the strictly legal sense, the Committee only make proposals to the communities or the provincial committees. The proposals now embody (which was originally a point of dispute) the amount to be allocated. In practice these proposals of the Committees are simply accepted by the authorities. If, in exceptional cases, the communal authorities reject the Committee's proposal, the parents, not the Committee, have the right of appeal to a higher committee, consisting of seven members appointed for the whole of Belgium under the direction of one of the higher courts in Brussels. The decisions of this latter committee are final.

It will be seen how carefully the entire structure has been incorporated in the body politic, at the same time maintaining the autonomous and politically independent administration of each of its parts.

Method of applying for Admission

Applications have to be made by the father or the legal representative of the candidate, and have to be sent to the communal or provincial committee before Easter. The decisions are generally given in the autumn.

The applications must indicate the purpose for which the child wishes to study, and also the sum required. The amount of the latter is always a relative one, the parents being expected to contribute so far as they are able to do so. Their financial situation has to be proved by means of an official certificate, too high an income constituting a reason for refusal. The fund is only available for workers, peasants, lower-grade employees and all such persons whose income is below a certain limit. This limit is graduated according to the number of the children dependent upon the parents. In the cases of widows and widowers the minimum amount is specially increased.

The *finances* of the Fund are made up of:

(*a*) A contribution from the commune amounting to 30 centimes per inhabitant a year.
(*b*) A contribution from the province of 10 centimes per inhabitant.
(*c*) A contribution from the State of an amount at least equal to (*a*).

Accordingly the foundation has available 7,000 Belgian francs (about £50) for each 10,000 inhabitants which it represents.

The commune is at liberty to increase its contribution.

Viewed from the standpoint of the law of property, each foundation constitutes an independent body, and can therefore obtain money from outside sources in any form and also accept legacies and donations.

The State is also entitled to accept legacies and donations for all the foundations or for individual foundations.

This independence of the funds in money matters is of importance, as it affects repayment. Any assistance given is treated, on principle, as only a loan, not of course in the legal sense but in the moral sense.

Experience shows that as a general rule repayments to the State are much slower than in the case of a corporation run on individual lines.

Methods for assisting Students

The *object of the studies* is not limited to the education in secondary schools, but is entirely free.

The lowest stage is the elementary school ; assistance can be given even for the two highest classes in the latter. Otherwise the Law provides for studies at secondary schools, teaching seminaries, attendance at technical schools, instruction in handicrafts and any other trade or artistic training. The only exceptions are courses of studies at universities. These are governed by a parallel organisation, known as the University Foundation (see Chapter Four). Should this University Foundation decline to accept a student, a case which may arise in a number of confessional universities, the Fonds des Mieux Doués can step into the breach.

In practice, statistics show that, as in similar institutions in other countries, more than half the payments are absorbed by the training of future teachers. At the same time every other conceivable form of training receives support, including even evening courses at certain technical institutes attended by the students after working hours, if such attendance entail a loss of wages.

The *extent* of the assistance is not limited. As a rule it amounts to between 1,000 and 1,200 francs per annum, but may be increased to several times these amounts. This sum may perhaps seem small, but having regard to the extremely low cost of living in Belgium, it represents much more than its nominal value when compared with other countries.

In fixing the amount of the sum allotted, the committees are given an entirely free hand ; but they are required to investigate fully the personal and material situation of the applicants.

It is expressly provided that the funds may be used to cover the following expenditure : books, things needed for studies, cost of pursuing the studies, the cost of living, travelling expenses, the cost of travelling and studying abroad, and in addition also the loss of earnings arising from the studies. This is especially important where poor families are concerned, in which the children have to start earning at an early age. In such cases the whole of the deficit in the family budget may be made up.

This question, so disputed in many countries, has been solved here in a positive sense ; not of course over the whole field, but so far as the restricted scope of the institution permits. In any case, it represents a beginning.

Method of Selection

The Law leaves complete liberty of action as regards the method of *selection*. But an enactment of June 26th, 1927, provides, in

Article 25, that applicants must be examined as to their physical and mental condition.

It is, of course, generally agreed that the *physical* condition must be the subject of a serious examination. Where there are real physical defects there can be little hope of great achievement. That an under-development or under-nourishment attributable to the social circumstances of the family will not be treated as such a defect is guaranteed by the social nature of the scheme. One committee even reported that it allows 300 marks for physical health in its examination scale ; i.e. an allowance far in excess of that made on other counts.

In testing the applicant's *mental* condition, the enactment provides that " in as far as possible " collective and individual, written and oral examinations, should form essential preliminaries to the selection.

Attentiveness, memory, reasoning faculty, imagination, critical faculty, temperament, emotional and æsthetic values, energy and other characteristics have all to be ascertained. The Committee has the right to call for full particulars from schools or other interested parties, and at the request of the Committee the teacher is authorised to be present at the examinations.

This brief enumeration must suffice to show the zeal devoted to ascertaining individual qualities and to estimating their true value. The plan offers great possibilities, far greater than those provided by the practice adopted in a number of other countries, of allowing one or two written examination papers to decide the future career of the boy or girl. The farther we get from rigid formulæ, and the more we seek to establish personal contact between examinee and examiner, the more likely we are to avoid certain dangers inherent in the existing examination systems.

The Value of School Reports

In so far as the school certificate is concerned, the predominating opinion in Belgium is that it must not be made the sole criterion ; the schools, their capabilities and their standards differ too widely. Grandmaître (*loc. cit.*, page 96) reports, from the results obtained by one of the committees, that it frequently happens that pupils who leave the elementary school with 90 marks (in 100) only succeed in gaining 60 marks in the corresponding class at the secondary school.

In the same report, however, he states that the opinions expressed by the secondary schools are more reliable, and that even the differences as between one school and another are not in their case so great. A very high value is placed on the opinions of the teachers in these schools. Their teachers are described as the best judges of the child ; and it is recommended that a steadily increasing dependence should be placed upon their judgments. The Committee from which this report originated adds : " We have never once had cause to regret the confidence which we have placed in the teachers (of secondary educational establishments)."

Such an opinion might perhaps elsewhere be the result of sentiment. But here we know it to be based on a wide experience, and for that reason all the more valuable. In spite of all the criticism which may otherwise be made of examination systems, this judgment can be confirmed by the experience gained in other countries, in its general purport if not in its entirety ; and other countries may safely feel encouraged to place increasing confidence in their secondary school teachers. This, of course, presupposes that the teachers themselves have been steadily trained in standards of comparison. To secure this end there is no better medium than a homogeneous centralised body of selectors engaged in steadily elucidating these standards and consolidating them.

The Process of Selection

How, then, is this *process of selection* carried into effect ?

This can best be explained with the aid of an example. The applicants are divided into categories according to their age and standard of education. Each group is given an examination consisting of one or more written papers, the results of which enable any hopeless candidates to be eliminated at once.

Psychological Tests

Psychological tests are optional, but are frequently given. Although they do not influence the final decision they are often valuable auxiliaries. Here again the fact emerges that sensible tests and good examination papers mostly yield concordant results. This concordance should furnish a valuable guide when the strictest fairness in the examination methods is being aimed at. Glaring divergencies between the results of the test and those of the examination are " signals of distress," and act as an exhortation to take greater precaution.

Oral Tests

The written examinations are followed by oral tests. Whereas all written papers are kept strictly anonymous by various methods, so as to obviate any risk of favouritism on personal or political grounds, the oral examination is kept entirely personal. It does not cover any specific school subject, but endeavours to reveal individual peculiarities, to determine deeper-lying personal values, and to weigh one against the other. It seeks even to find out the trace of the candidate's preference ; and thus, even at this stage, begins a work which, while it assists the actual test, serves also to determine the vocational trend. All the reports give one the impression that it is precisely this part of the examination which has the greatest personal value.

Final Comparison of Results

Finally the results of both written and oral examinations are compared with the school certificates and with the opinions given by the headmasters and teachers.

Upon this basis the Committee makes its decision, three members forming a quorum. It is not merely a decision upon the result of the examination: it also determines the direction which the studies are to take and the sum which is to be allocated.

The "Loan" Aspect of Grants

The grants are made for one year. All cases are reviewed every year, and the members of the Committee maintain personal contact with the young student. As a general rule, satisfactory reports from the school are sufficient for the loan to be continued beyond the first year.

The fact that it should be a *loan* is surprising, and calls for further explanation. It is based on the calculation that a really capable young pupil or student should later in life be able to repay the assistance given. Those who have "arrived" should in their turn help youth in its struggle. No one should claim public moneys unconditionally, if he is able to help himself. Repayment is a form of "self-help," but this self-help is separated, in time, into two divisions.

As in all similar cases, vehement discussions have arisen over this idea of self-help. It has been found that the parents and even the children themselves hesitated to mortgage their future, always problematical, with such heavy burdens. The reluctance to apply for and to accept money was most apparent precisely in those individuals who had a developed sense of responsibility.

A legal liability for the repayment of a loan representing the costs of an education covering several years would indeed be too heavy a burden for young people between the ages of 14 and 20 years. Under similar circumstances, the largest student-loan undertaking in the world, the "Loan Fund of the German Students' Association," decided in 1921 to restrict the grant of loans to the latter half of the university course. The period for repayment was fixed at eight and ten years after completion of the studies. This rule was made so that no repayment should be demanded when, in view of the personal circumstances of the debtor, it meant unfair hardship. The risk of death is covered by insurance.

This system has worked well in Germany in dealing with more than twenty thousand cases. Above all, it has the advantage of maintaining personal contact between the selecting body and the student after completion of the latter's studies. This enables the possibility of checking the method of selection, since it is practical after-life, and not the life at the educational institution, which can alone demonstrate its value.

The experience gained in Germany, however, showed that, there at least, the matter of granting loans for studies and educational purposes had been taxed to its utmost capacity.

The Belgian educational authorities and legislators have adopted a different course. They have laid down that there shall be no juridical liability for repayment in any shape or form on the part of the young student or of his parents. On the contrary, it is left entirely to the sense of moral duty as to whether, when, and to what extent, the money shall be repaid.

The results so far obtained are still uncertain; nor can they, in fact, be otherwise, in view of the short time that the Institution has been in existence, and of the youth of those to whom funds have been granted.

It is the experience of several countries that, unless certain psychological media are employed, the purely moral compulsion does not secure a full repayment. It can be stimulated up to 95 per cent., but it usually falls much lower. Even actual repayments up to 60 per cent. might be considered a good result. Nevertheless, we should not be justified in assuming that the other 40 per cent. are lacking in moral sense.

Even in such measure, however, the repayment of the funds advanced and the resultant psychological bond created between institution, individuals and generations is of value. The strong link established between individuals and an independent educational body within the social structure promotes a noticeable esprit de corps; this, properly nurtured, can be turned to good account.

Leon Bauwens, in commenting on the results so far obtained, mentions on page 16 of the *Code des Mieux Doués*[1] the example of a Province with 700,000 inhabitants and 458 assisted students. Of these students, 31 have repaid the advances in full, 53 having repaid a part; and out of 695,332 francs, 55,900 francs have been repaid. In judging of this latter sum, we must not forget that the assisted students are still young, and that repayment can only slowly be made.

A number of tables taken from Leon Bauwens' book referred to above give useful information regarding the extent of the work which has already been done:

1. *Contributions*

YEAR	FROM THE COMMUNES	THE PROVINCES	THE STATE	TOTAL
1922–23	740,000	148,000	740,000	1,628,000
1923–24	1,022,000	253,000	1,011,000	2,286,000
1924–25	1,382,000	406,000	1,378,000	3,166,000
1925–26	1,768,000	564,000	1,763,000	4,095,000
1926–27	2,135,000	723,000	418,000	3,276,000
1927–28	2,240,000	738,000	2,240,000	5,218,000
1928–29	1,898,000	634,000	1,474,000	4,006,000
1929–30	2,210,000	733,000	2,239,000	5,182,000
1930–31	2,160,000	743,000	1,899,000	4,802,000
1931–32	2,030,000	682,000	1,813,000	4,525,000
1932–33	2,234,000	730,000	1,299,000	4,263,000
	19,819,000	6,354,000	16,274,000	42,447,000

---

[1] Leon Bauwens, *Code des Mieux Doués*. Bruxelles, L'Edition Universelle, S.A., 1935.

2. *Loans for the Training of Teachers*

YEAR	SECONDARY SCHOOL		CENTRAL SCHOOL	
	NUMBER	AMOUNT	NUMBER	AMOUNT
1931–32	1,043	1,288,570	72	111,150
1932–33	1,236	1,402,954	112	140,300

3. *Loans for Higher-grade Schools*

YEAR	CENTRAL SCHOOLS		SECONDARY SCHOOLS	
	NUMBER	AMOUNT	NUMBER	AMOUNT
1931–32	988	797,021	1,698	1,916,117
1932–33	1,179	859,740	1,756	1,802,313

4. *Loans for Technical and other Studies*

YEAR	TECHNICAL STUDIES		OTHER STUDIES	
	NUMBER	AMOUNT	NUMBER	AMOUNT
1931–32	704	645,367	383	505,695
1932–33	763	564,260	398	503,785

5. *Recapitulation of Loans and their Amounts*

YEAR	NUMBER OF LOANS	TOTAL AMOUNT
1922–23	1,361	747,947
1923–24	2,351	1,418,364
1924–25	2,749	2,024,038
1925–26	3,348	2,713,489
1926–27	3,972	3,576,842
1927–28	4,330	4,615,202
1928–29	4,654	5,039,984
1929–30	4,545	5,125,735
1930–31	4,601	5,280,347
1931–32	4,888	5,263,920
1932–33	5,444	5,273,352
	42,243	41,079,220

Effects of Loans

Unfortunately, the statistics give no definite figures as to the number of the individual students to whom the 42,243 loans were granted. But we are far wrong if we assume that the individual does not on an average remain for more than four years in receipt of assistance. So that about 10,000 young people may be presumed to have been enabled, as a result of this State scheme, to develop their gifts to the limit of capacity.

If we study the social history of Belgium even during the last few decades, we are met by evidences of extreme impoverishment and despair ; and this in almost every division of the population. The figures which we have given can only be appreciated at their true value when seen against this dark background. Only then can we realise the magnitude of the hope which, by means of these 10,000 young people, has been rekindled amongst the poorest classes of the community.

Some Social Effects of the System

Belgium was one of the first countries in Europe to produce, several centuries ago, a prosperous and wealthy upper class as a result of its textile industries and extensive trade. But it endured at the same time a degree of poverty among its working-class population which approached the limits of human endurance. For centuries hundreds of thousands of people lived more or less upon alms, and on the charity of the Convents and Churches. One who has a profound knowledge of the social history of Belgium, the present Belgian Social Minister, Hendrik de Man, speaks of a " 700 years' accumulation of physical want " (Hendrik de Man, *Die Eigenart der Belgischen Arbeiterbewegung* [*The Nature of the Belgian Workers' Movement*], Stuttgart, 1911, page 8).

He states that, under foreign domination, the Belgians themselves were excluded from the political government of their country until 1815. The population was so oppressed that, even at the beginning of the twentieth century, Belgium was still " the country with the longest working hours and the lowest wages." He attributes to this the fact of the " paltriness exhibited in the dominant political views, ideas and personalities."

If we set against this opinion of twenty-five years ago a work such as we have described, it seems even greater in its scope ; and, with such a past behind it, its effects must be even more far-reaching. Those decades, we know, which follow upon the awakening of a passive lethargic people are apt to be particularly fruitful and promising. By this one example, the scheme for assisting the most capable amongst its youth, Belgium has again demonstrated the truth of the words of Elysés Reclus : " Belgium is now the experimental field of Europe, after it has so long been its battlefield." Europe and the rest of the world can learn much, both from the direct and the indirect effects of this scheme. Belgium is a living example of the fact that a country which is struggling to attain light out of darkness can find no better way than that of education.

The effects upon national public life can naturally only become manifest in twenty to twenty-five years' time. Then the generation produced by this new institution will be in action. But even at this early stage it is possible to observe noteworthy results.

The first result is the existence of an association comprising several hundred educators—in the broadest sense of the term—throughout the country. They are men constantly in touch with the best type of younger folk, and acquainted with the attitude, the needs and the tendencies of the younger generation. This is a unique advantage. It may be objected that teachers always do this. But there is a vast difference between the effect of thousands of teachers consorting daily with hundreds of thousands of children under conditions imposed by their status and the Government, and that of a small group of teachers permanently in touch with a number of groups of young pupils and ex-scholars spread wide over a whole country. The effect is further enhanced if, as provided by the Ministerial Enactment of August 27th, 1927, this circle of Selectors also remains in constant touch with the parents. The fact of having, as it were, a cross-section through the younger generation of students always in view increases the value of such a procedure.

The 470 members of the 94 committees in the 79 districts of Belgium can form thus the nucleus of an educative community unique of its kind. They are gathering experience which must be of service beyond the Belgian frontier. The years to come will help to consolidate this experience, to strengthen the function and the tradition of these committees. Even to-day, the different provincial committees meet together frequently to exchange experiences; whilst their representatives assemble for discussion from all parts of the country.

We know of no other body so suited to form the nucleus of a "permanent organisation" to study all the vital problems connected with the oncoming generation, or one more resembling that suggested by Grandmaître (*op. cit.*, page 44). The reports of these groups, which are preserved by the Ministry of Education in Brussels, form a veritable mine of information on subjects connected with youth. They will be increasingly valuable. Other countries might well follow the example.

Vocational Guidance

A point which appears to us to increase the importance of this movement is the explicit instructions to committees not to confine their efforts to the examination of the individual, but to devote special attention to his vocational guidance, direct and indirect.[1]

Here we find traces of an incipient vocational policy. On various occasions the Ministry has suggested, for example, that students' attention should be directed more to the practical professions of clerks and technicians, rather than to the overcrowded teaching profession.[1] On another occasion, the Ministry pointed out that any decisions regarding the choice of a profession made before students reach the age of 14 or 15 connote certain reservations.[2]

---

[1] Ministerial Circular of February 3rd, 1933 (see Bauwens, *op. cit.*, page 85). "The Work of the Selection Committee is therefore incomplete if there is no real vocational guidance of the young people, who resort to the foundation."

In guiding the youth of a country in their choice of a profession example is of the greatest value, because imitation plays an important part. If a few outstanding students can be guided in the right direction, much has already been gained. These few students may be enough to give a new direction to the ideas of a much larger body.

The last " indirect " effect may be summed up as follows :

After the committees had been in existence for four years, their experience led to the expression of a desire that the schools should devote greater attention to the keeping of a close and constant observation upon their scholars.

Suggestions for judging Pupils' Ability

By Ministerial Circular of January 15th, 1935, the attention of the schools was drawn to the fact that a continuous observation of the pupils had a value beyond that of the immediate objects of the Fonds des Mieux Doués : " It is therefore desirable that all school authorities should institute the practice in their school of keeping constant observation on the pupils ; and that all who assume the onus of instructing young people should make this slight effort, and so make use of a medium that can give a right direction to the teacher's work and help towards its success in so far as it contributes to his accuracy and to his standard of judgment" (Bauwens, page 76). The same circular contains detailed suggestions for this judgment of the pupils' ability. We give below in somewhat abbreviated form a number of extracts:

> " A complete study of the pupil, comprising an investigation of the following points :
>
> " *The child's past :* hereditary dispositions, surroundings during early infancy, physical and mental growth, complaints of early infancy, opinions of its first teachers.
>
> " *The child in the elementary school.*—Physical condition, health, growth, physical development, liability to fatigue, influence of family and school surroundings, organs of speech.
>
> " *The senses.*—Sight, hearing, smell, taste, condition of the organs.
>
> " *Intellectual condition :* receptive capacity, attentiveness, memory, imagination, association of ideas, judgment, quality of speech and pronunciation. Understanding, critical faculty, ingenuity, enterprise, taste in reading.
>
> " *General intelligence :* quality of school work. Influence of home surroundings. Moral condition ; good points and faults ; behaviour towards brothers and sisters and friends, attitude to animals, behaviour in school towards teachers and other pupils.
>
> " *Character and strength of will.*—Æsthetic sense. General opinion."

Duties of the Teachers

" To multiply such studies is undoubtedly laborious, and under the present conditions of teaching, the majority of teachers could never carry it completely into effect. But when we come to consider the exceptional value of the results we may obtain, it would appear desirable at least, that every teacher should make some effort to undertake this task, so far as his reserves of energy allow. The knowledge of the child is in reality the basis of all rational education. By this knowledge alone can the teacher accurately gauge the level of his instruction and check his results.

---

[1] Ministerial Circular of August 27th, 1927 (see Bauwens, page 80).

[2] Ministerial Circular of November 23rd, 1927 (see Bauwens, page 106).

"The practice can be, also, of great service to the social function of the school.

"It can serve, further, more than anything else to bring about a close personal relationship between teacher and pupils. Many teachers get to know their pupils thoroughly ; but a majority still judge them principally by their work in class.

"Intelligence and class work frequently develop in association, but there are many exceptions. Even the so-called 'good' pupils include a number who possess small intelligence ; and amongst pupils described as bad scholars by their teachers there are many who are worth much more than the teacher assumes, and who go further in life than many of their fellows who obtained better results at school.

Methods for recording Impressions

"Teachers are inclined, also, to regard the school surroundings as the sole standard of value of a pupil. To escape from this, they have to widen the scope of their investigations ; to talk with the parents, and to get to know the pupils personally. Often the child's real personality becomes apparent at play and during expeditions ; and it is all too frequently masked in the school-room.

"The teacher should record his impressions on an observation sheet, of which a specimen is added. If it is an extra trouble, it is one that will repay him richly in the end.

"Tests play an important part in such observation with experiments. Tests and observation complement each other ; and it is most desirable that all teachers should learn the method of Tests. Its employment is always difficult, because it postulates a definite technique and a certain degree of fine discernment in interpreting the results."

The observation sheet referred to above contains among others the following detailed reminder : strength, speed of movement, phenomena of fatigue, attentiveness, powers of observation, memory, judgment, creative imagination, desire for knowledge, enterprise, adaptability, taste in reading, sayings, skill in handicrafts, personal character. Fond of eating choice food, or of frugal taste ; self-indulgent or self-disciplined ; neglectful, dirty or clean, neat ; unselfish or self-satisfied ; exacting or modest, greedy or generous ; untidy or orderly ; timid or courageous ; brutal, forceful or quiet, calm ; fidgety or serious ; boastful or reserved ; attitude towards animals, cruel or gentle.[1]

---

[1] Bauwens, *op. cit.*, pages 46 *et seq.*, 76 *et seq.*

Advantages of the "Fonds des Mieux Doués"

In summary: the special character and in many respects the advantages of the Belgian *Fonds des Mieux Doués* can be comprised under the following headings:

(*a*) The scheme is not limited to higher-grade schools. It is equally helpful to all forms of education, including technical and trade training. It takes into consideration even evening schools, artistic training and foreign studies. It does not over-encourage the intellectual professions. Its object is to raise all professions to an equal footing.

(*b*) It sets no age limit. It is open to all young people from the age of 12 years onward.

(*c*) It links up the methods of vocational guidance, for the choice of professions. It makes use of example and imitation, through the persons of the outstanding students.

(*d*) It makes use of free methods; encourages experiments; emphasises the greater value of school certificates and tests, if used in conjunction with other methods; insists upon constant personal contact and conversation with the parents.

(*e*) Its smaller local committees are in constant touch with one another, both in the separate Provinces and throughout the whole country; so that experiences are continuously exchanged, and the Central Committee becomes a vital source of good tradition.

(*f*) Thus it avoids the drawbacks of an anonymous bureaucratic institution and ensures to its work a personal character. Its independent position, also, and the method of loans it employs, contribute to the formation of a corporate body strongly imbued with a sense of responsibility. By the same means the possibilities of political rivalries are neutralised.

(*g*) Already its principles have been successful in starting a movement throughout Belgium for a constant, close observation of pupils on the part of all teachers.

CHAPTER FOUR

THE FONDATION UNIVERSITAIRE[1]: BELGIUM

THE work of the *Fondation Universitaire* begins at the point where the work of the *Fonds des Mieux Doués* in Belgium ceases. Its object is, by means of its *Prets d'Etude*, to render university studies possible for the gifted children of poor families, to pay for their residence abroad when necessary, and in this way to contribute within limits to the creation of a national *élite*. The *Fondation Universitaire* was founded by an Order of June 7th, 1920.

Financial Assets of the Fondation

It possesses capital assets which in 1934 amounted to more than 59·7 million Belgian francs, and which in 1935 had increased to 61·7 million francs. The receipts and interest amounted to a little more than 3 million Belgian francs.

Its assets emanate chiefly from a gift provided at the end of the war by the Commission for relief in Belgium, under the administration of Herbert Hoover, out of surpluses from the supplies of food for the Belgian population. Herbert Hoover is still Honorary President of the *Fondation.* In addition to Herbert Hoover and the permanent director, Jean Willems, the chief merit for the creation and building-up of the *Fondation* is due to two men whose death was a great loss to Belgium—King Albert, and the former Minister of Finance, Emile Francqui.

It is mainly due to these four men that Belgium possesses this exceptional Institution, in which " War Profits " were ingeniously applied to offset " War Losses." Apart from the English and American " Boxer Indemnity Funds," this Belgian example is the only instance of public funds subscribed in connection with war or its termination being devoted to intellectual or spiritual objects. While hundreds of millions of pounds changed hands between the countries in the shape of reparations, clearing and settlement of debts, these 50 million francs would alone appear to have been used for youth and education. It is not too harsh to say, that during the year that followed, an immense opportunity was missed. The Belgian example shows what might have been effected on larger lines. By 1934 the *Fondation Universitaire* had already enabled 1,800 young Belgians without means to continue their studies ; and the number continues to grow. The future will show how many pioneers and leaders of progress may be found among this number. For the present, we know that only 7 per cent. of them failed to complete their scientific studies by obtaining a degree. The 93 per cent. successes is thrown into relief by the fact that, if we take the general average, only 40–50 per cent. of Belgian students complete their studies with a degree.

---

[1] Complete information respecting the *Fondation Universitaire* is given in the exceedingly clear and comprehensive Annual Reports, important detailed portions of which are also abstracted as special reports.

The *Fondation Universitaire* has its seat in a large building of its own in Brussels in the Rue d'Egmont ; which also contains a university club of a unique kind with a home for native and foreign professors.

Seventy-eight per cent. of 1,200 cases have secured posts which justify the expectations of their student days; 7 per cent. are in other posts; 7 per cent. failed to complete their studies; 4 per cent. have died; 4 per cent. are unemployed, more than one-half of these being engineers. Having regard to the extension of unemployment in middle-class occupations in Belgium, this is a very satisfactory result.

Grants to Students

The grants range from 1,900 or 3,000 francs a year up to 8,000 francs; and they are without exception furnished as loans. This, as the *Fondation* succinctly expresses it, is "on moral grounds."

Repayments have to begin ten years after completion of studies, i.e. those who completed their studies in 1920 had started their repayments in 1930. The group of the year 1920, due to begin repayment in 1930, has until to-day repaid 100 per cent.; the next group, due 1931, has repaid 89 per cent.; the next group 61 per cent.; the next 54 per cent. and the group, due to begin repayment in 1934 had by 1936 already repaid 46 per cent. These results are an encouraging evidence that the policy of making loans was right.

In the Annual Budget for 1934 the repayments appear as 508,207·12 francs, and in 1935 as 556,600 francs. Since more than one-half of the annual resources of the Foundation, i.e. about 1,700,000 francs per annum, is used for loans, the increasing receipts from repayments will soon cover one-third of the expenditure.

The total amount expended 1920–34 was 12·5 millions.

Type of Students Recruited

In compliance with the idea of the *Fondation* the students are drawn from the poorer families, those therefore lacking as a rule intellectual traditions. The following *list* classifies them according to origin:

Clerks and lower-grade Civil Servants	37 per cent.
Artisans and workmen	20 ,,
Orphans (fatherless)	21 ,,
Farmers and small shopkeepers	10 ,,
Clerks and higher-grade Civil Servants	5 ,,
Liberal professions	4 ,,
Orphans (fatherless and motherless)	3 ,,
Merchants and industrialists	0 ,,

The majority, therefore, come from the families of clerks and lower-grade Civil Servants, a specific environment which must be taken into account when we read the critique of the results of the entrance examinations.

The following list, for 1935, shows how the grants were divided among subjects :

Philosophy and Literature	50 loans
Legal Science	36 ,,
Mathematics and Natural Sciences	27 ,,
Pharmaceutics	9 ,,
Medical Science	75 ,,
Dentistry	2 ,,
Veterinary Surgery	2 ,,
Engineering Studies	37 ,,
Agriculture	5 ,,
Colonial Science	1 ,,
Politics and Social Science	1 ,,
Commercial Science	4 ,,
Theology	1 ,,
Science of Art and Archæology	2 ,,

At first sight this distribution is surprising. In similar cases, it is usually found that philologists and teachers are in the majority ; whereas here they are represented by at most 77 out of 252. Probably the overcrowding of the teaching profession has acted as one deterrent factor, and a particularly strict method of selection, limited mainly to school subjects, as a second.

The Method of Selection

The *method of selection* is severe. Out of between 140 and 150 candidates from the higher schools, hardly one-sixth pass. In 1934, for example, only 23 candidates out of 144 were successful ; in 1935, 26 were admitted from the school and 62 from the university ; in 164 other cases the loans were prolonged.

The Three-stages Examination

The examination takes place at Brussels, and consists of three parts :

(*a*) Written work on general knowledge papers lasting four hours. One of the examiners gives a twenty-minutes' lecture. No notes permitted. The purport has to be reproduced, the student is required to define his attitude towards the problems. Inaccurate statements, which may be intentionally introduced into the lecture, have to be noted and refuted. Above all, the student has to contribute something of his own to the subject. Form and content are alike taken into consideration, independence of judgment, lucidity and style. The written work, submitted anonymously to several examiners, has a value of 75 marks out of 200, and therefore represents the main test of the examination.

(*b*) A conversation lasting fifteen minutes with two professors, on any free subject. This is intended to test especially maturity of judgment, quickness of mind, facility of expression and personal characteristics.

(*c*) Five other oral tests of fifteen minutes each; upon subjects studied in the higher schools. The first group from which a selection can be made comprises English and German; the second all other languages, history, geography, natural sciences, etc.

To each of these five oral tests is allotted 25 marks. The marks are given independently by the examiners. In the event of a difference of opinion, the average is taken.

School certificates are not on principle taken into account, but it is assumed that the candidate has passed his entrance examination for the university with a certain distinction.

In this method only section (*a*) is original. In the opinion of the Foundation it is said to have proved particularly valuable. Among the themes treated have been " The importance of Vaccination, " The conception of Art." On principle questions are put which do not assume any expert knowledge; the test is of the general education. In the first subject, for instance, the five best results were those, not of students of the natural sciences, but of students from the literature department. Cramming for the examination is thus avoided; memorised knowledge is no advantage. The same applies to the first of the five oral tests. One-half of the marks therefore are expressly allocated to examinations upon other than memorised material, and the other half to subject-matter learned at school.

In the hands of a good examining body, following on a common tradition, the method gives excellent results. The annual reports, issued by the jury of eighteen professors, testify to the exceptional care with which they employ it. These reports are, further, a mine of information as to school-training and youthful mentality.

Reports on the Quality of Students

The indirect effect of such a board, testing a cross-section of the country annually, is also of value, in that it can detect in good time the recurring fluctuations that take place in generational quality.

Of these the reports give evidence. That of 1933–4 arrives at the following conclusion:[1] " Outstanding students are conspicuously lacking this year." That for the following year repeats the statement, with the comment that " the entire group is only remarkable for its respectable mediocrity." The report also defines the new type of student as " L'etudiant minimaliste "; one whose aim is to achieve as much as possible with the least possible exertion. To scrape through safely and no more has become the standard, and a law of minimum fatigue prevails. Such a maturity-test reveals before all the lack of preparedness; the education of the young people has not been one that built up character. One of the examiners remarks : " the rising generation is ranging itself prematurely in parties or sects : the group spirit is evidencing itself to a melancholy degree. Under cover of subordinating themselves to a group action, political or social, young folk think, and above all write, as a ' gang.' " To counteract this danger it is advised that the claims of a healthy individualism should be restored by more varied reading, by direct contact between student and teacher and by an artistic cultivation intolerant of any " categorical imperative." Students whose general culture reveals such defects are recommended to devote one year to personal work and study, and if possible, to travel or residence in a foreign family, before commencing their further studies.

---

[1] "*Fondation Universitaire,*" "*Quatorzième Rapport Annuel,*" 1933-34. Bruxelles, 11 Rue d'Egment.

" The experience of more than ten years furnishes abundant proof that the majority of scholars coming from higher schools are not ready to leave them." These words occur in the Report for 1933–4. The next Report states : " The majority of the candidates work too little even under favourable conditions ; they do not read serious books, but only those of no value. There would seem to be a deplorable abuse of leisure, and a premature inclination towards political or social group action. . . . Development of individual character, by reading, observation and discussion, should precede membership of clubs, groups or clans. . . . We are astonished by the lack of artistic culture, as displayed in a country of great artistic traditions. . . . Interest in music, in drawing, in masterpieces, in beauty seems dead." [1]

Similar criticisms appear when the examination subjects are under consideration.

Reports on the Oral Examination

On the oral examination the comment is made : " No intellectual curiosity, little sustained interest, these are the depressingly noticeable features. The pupils would seem to have no longer the time or opportunity to read, or the leisure to observe ; they show little interest in the works of great authors, or in mental problems ; in all but a few cases they seem guided by nothing but considerations of utility." [2]

The examiners in German state : " The vast majority seem bored. . . . Completely devoid of intellectual education. One pupil was even unable to give the name of the author whose work was set for the examination. He admitted the fact, with the ironic comment that, in his opinion, the detail had no importance."

Such contempt for " detail " is repeatedly remarked upon ; as also upon the fact that the style is wholly undeveloped and corrupt, presumably formed only upon the reading of inferior newspapers.

Some distinction is made between the verdicts given on the results in different subjects : " If we may say so without offence,

[1] *Op. cit.*, page 45.

[2] *Op. cit.*, page 47.

the examiner in commercial subjects[1] was the first who declared that out of all the candidates who took his subject there was not one who qualified by merit for a loan." On the other hand, the five best results were those of girl-students of philology. It would seem, indeed, that the cultural subjects did best in these maturity tests; and mention must be made of two other important exceptions. The 1933–4 Report states: "Young girls are the outstanding successes in 1933. They secured the first five places, and also the seventh place. Whether we like it, or dislike it, it remains the fact. The first four of these girls had chosen Greek, the first even Greek and Latin! The report sees in that "a triumph of the disinterested culture. All true friends of humanism will share our joy!"

The same report has only praise for candidates in natural sciences. In mathematics, there is comment upon the high degree of proficiency shown; and 65 per cent. of the successful candidates were mathematicians. Equally good were the results obtained in chemistry. But once again, at the close, a crushing verdict was passed upon the commercial subjects: no general education, no maturity of mind.

The Value of assessing a Nation's Students

Such a critique, upon a sample of the youth of a single country, has great value. Those who are in touch with the youth of many countries are aware that it should be taken as a warning, of a generational fluctuation, not to be remedied by a mere reorganisation of curricula. They are aware, too, of how limited are our present means of determining such depressing fluctuations with any scientific exactitude. But Belgium here supplies us, under the charge of this group of earnest scientists, with an engine capable of making such observations with a great degree of accuracy. Its results enable us to set a new and objective value upon our own personal impressions, gained in the same connection in other countries.

It can no longer be questioned that higher education in many continental countries is seriously threatened. Over much of its field of activity it has begun to lose its power to produce independence of thought or desire for knowledge. Its present product promises no great future personalities. The self-satisfaction emerging from such a combination of egoism and boredom as we have noted, is in itself a danger, not only for the schools, but for the general welfare. For careerism, and the contempt for intellectual effort, cannot fail to exact a grim revenge from later life.

It is of course true that, by the nature of this Belgian Foundation, its beneficiaries are drawn principally from a particular social level, that of the upper working-class, and of the lower and middle Civil Servant and employee order; and that it is frequently maintained that the older cultural stratum of the higher classes remains always strong enough to counterbalance any such menacing tendencies. But this last is an illusion. In the mass process of the training of future generations no element has more weight than the middle-class. On the Continent, at least, culture and politics are becoming increasingly dependent upon the character and aims of this social stratum; and the middle-class mind of every country remains in great part " bourgeois " and philistine, influenced by motives of self-interest and material gain, and devoid of higher standards or ideals.

---

[1] In the Belgian High Schools this is the subject of a special group.

As a result, the elevating effect, traditionally ascribed to the processes of higher education, has ceased to be operative among wide sections of this order of youth.

The phenomenon should not be examined from a sociological standpoint alone. The structure of higher education itself must come under a more critical review. Subjects are proving of different value as formative influences. We have noted the effects in this sense of trained mathematical thinking and of the study of the natural sciences. Further, of those which, especially in the case of women students, are produced by the older cultural or philological studies. Other subjects, on the contrary, no longer succeed in kindling a lively response in young minds. They meet too often only with an atmosphere of boredom and slovenliness. Many candidates, for instance, are described by a Belgian examiner as treating the study of German as if it were a dead language. Other subjects are suffering from the same failure of vitality. And we cannot expect that such decay will stop with the school-life or the maturity examination: its after-effects threaten the whole social structure.

We find an entirely different state of things when we come to the lower stratum; where the sons and daughters of workmen, peasants and artisans are following the traditional lines after leaving their elementary schools, and are combining their practical occupations with after-education in specific subjects.

If we compare the atmosphere maintaining in the classrooms of different grades of schools, we may become convinced that, in a workshop for apprentice metal-workers, for instance, there is a far more vital spirit than can be found in many schoolrooms of higher-grade schools. The human material strikes us as more lively, keener, more sensitive to formative influences. We are made to feel the soundness of a method which bases further education upon a thorough elementary school training and personal experience of a craft or occupation. Any continental country which develops scientifically this branch of education can be confident of the quality of the human element it is producing, in this order of society.

But it is undoubtedly in the region of higher schooling that our most difficult problem lies, and in the question of how to synthesise successfully the material of instruction and a genuine training of human character.

There are those who say that the increasing pressure of examinations lies at the root of the evil: that it is sapping the life out of all genuine education. In France, especially, they have become aware of this danger; and their concern with it is not merely limited to questions of method, but covers the whole human aspect of the problem. Two quotations may suffice to give this point. Writing in the French *Journal des Instituteurs* (82 year, No. 12), M. A. Moreau says: "We are aiming too high. We are trying to force up our examination standards. The majority of our pupils have neither an equivalent maturity of mind nor a corresponding knowledge. It is plain that we must simplify instruction, concentrate it, focus it upon a few important points; and this not only in our teaching of French, but in every subject and at every stage of education."

Paul Valery expresses himself even more forcibly: "The Diploma is the deadliest enemy of culture."

Bibliography

The literature about the *Fondation Universitaire* is large. There is the annual report, for example: *Fondation Universitaire Quinzième Rapport Annuel*, 1934–5, Bruxelles, 11 Rue d'Egmont. This report contains descriptions of many other activities of the *Fondation*, as: Contribution to publications, exchange of professors, assistance to public libraries. There is another comprehensive report: *La Fondation Universitaire et les Institutions à la Création desquelles elle a participé*, Bruxelles, 1935. Remark furthermore: *Fondation Universitaire, Prêts d'Etudes*, Bruxelles, 1935. *Fondation Universitaire, Les Institutions d'Enseignement Supérieur et de Recherches en Belgique*, 1930.

CHAPTER FIVE

The Ateliers-Ecoles, Paris

Historical

" Many of our children, and especially those who come to us during the course of the year, wish to hear nothing more of school when they report to us. Having imposed their will on their parents, they only consent to enter our Ateliers-Ecoles because they know it is the start of a training for an occupation and because in doing so they expect to be free from any intellectual exertion and even from contact with books.[1]

" Our observations made on children who come to us from the Elementary School have convinced us of the necessity for prolonging the school age before entry into the workshop.

" A child leaving the Elementary School knows how to spell—though not well enough—is accustomed to read and also to write composition. Nevertheless, it is out of its bearings when confronted with the different conditions of occupational life. The boy no longer thinks spelling useful when he uses a hammer and chisel, the writing of composition seems to him out of place when he has to report on a job which he has carried out, or when, in a letter to the owner of the business, he has to indicate the various things required during the course of the work. We have to create in him a new mentality.[2]

" We are on the side of those who are anxious to see the school age raised ; but, judging from our own experience, we believe that such a measure is doomed to failure if it is merely confined to repeating, in the same form and in the same environment, the instruction already given in previous years.

" In our opinion, it is better to place the children in a new environment, and to teach them by new methods which are more concrete, more active, which have their future occupation as the centre of interest." [3]

" We have found the formula which permits of effecting the transition from school to workshop with a minimum of risk, and of awakening in youth the desire for work, for exertion, and a love of self-education." [4]

THESE words are taken from the reports recently issued by the Paris Chamber of Commerce in connection with its widely ramified schools, the Ateliers-Ecoles.

These schools would appear to be the greatest educational institutions yet created by a Chamber of Commerce. When a body representing the commerce and industry of a city like Paris has set up special schools accommodating about 2,500 young people between the ages of 13 and 18, and has been carrying on the experiment for fifteen years, the undertaking is deserving of general attention.

In the same city where, nearly 150 years ago, the old corporations and guilds lost their right to educate and train the rising generation, the collective body which represents those same occupations is proceeding, after a lapse of 150 years, again to take over this educational function and to develop it.

---

[1] Quoted from : *Chamber de Commerce, Paris* : " Les Ateliers-Ecoles depuis l'Origine (1920)," jusqu'au 31 Décembre, 1934, page 48.

[2] *Op. cit.*, page 7. [3] *Op. cit.*, page 48. [4] *Op. cit.*, page 30.

The world development runs in cycles and mostly returns to the same point which it has left. We are justified in speaking of this as " progress " when the same point is reached at a higher level ; and wisdom details that, from a phenomenon of this kind, we should attempt the prognosis of the trend of future development in other countries as well.

Abolition of Monopoly of Guilds and Corporations

The point at which this spiral of development has again approached the same point lies high above its former one. The old corporations lost their educational function because of the abuses which, from selfish motives, marked their educational monopoly. They closed the path to youth and barred the way to new impulses. The apprenticeship and journeyman period was unduly prolonged ; the capable journeyman was often unable to become a master, either because the master's position was inherited as a family privilege, or because he was required to pay extortionate due to his old master and to different bodies of the corporations and their associations as a condition of promotion. The training of apprentices was neglected. This state of affairs had long before the Revolution led Turgot, during his Great Reform of 1776, to abolish the privileges and monopolies of the Guilds, and to proclaim the unrestricted freedom of labour ; a measure which had to be revoked a year later under the pressure of the guilds. Subsequently, however, the French National Assembly, in Art. 7 of the Law of March 2nd, 1791, declared the complete freedom of every citizen to choose and exercise his occupation. The monopoly of guilds and corporations in training the rising generation was thus abolished.

This radical solution, however, paved the way for new and serious abuses ; the arbitrary exploiting of apprentices began to grow apace. At that time the germ was sown of the insidious disease which has long affected occupational training in France, and from which it has only been slowly recovering during the last few years. This recovery shows now every sign of a return to robust and normal health. One of the evidences of it is the work of the Paris Chamber of Commerce in technical education.

This new corporation is animated by a very different spirit. It would be difficult to find a more encouraging example of the law of human progress than that afforded by comparing it with past corporations.

The Creation of a New Atmosphere

If we enter the building at 2 Place de la Bourse, in Paris, in which the eminent educational statesman, Aristide Lomont, works with his excellent staff, even the smallest details reveal a new atmosphere of goodwill. The innumerable young people between the ages of 12 and 15 who, often accompanied by their parents, come here to obtain guidance find themselves in an atmosphere of humanity and of disciplined order, such as aptly combines the character of a school and the principles of a well-conducted industrial undertaking. To describe these critical years of transition, the French language has found the term "l'âge Ingrat" (the ungrateful age). In France, more especially, this expression is fraught with meaning. But here the young people meet with a treatment which should make even this age grateful. Particularly one may remark the "patriarchal" relationship, without which a group life in France is hardly conceivable. Too often, indeed, this traditional system is now obsolete, fossilised and mistrusted. But here, because of its vital content, it stands again revealed in its full, natural strength. For the authority of a father can always be maintained where he really seeks to understand his children, and regards youth, not as the subject of his arbitrary will, but as a partner with rights. Humanity in personal relationship can obviate any tyranny of tradition; and the personal relationship, one of the most potent sources of the strength of France, is still stronger than a colourless institutionalism.

The Ateliers-Ecoles expand this principle; they make the young man and his education the centre point of their work, of their observation and their experiment. While they set before him his future occupation as his own "centre of interest," he becomes, to an admirable degree, the centre of their own.

The fundamental change which has taken place during the last 150 years is that, in the past, the corporations were guided by egotistical motives: individual gain was the cancer which killed them. But to-day they are guided more and more by the feeling of kinship which develops naturally out of consideration for one's neighbour and for the generations to come. Paris, which in 1776 rejected the corporations as educational factors, has reason now to be proud of the results of again trusting them. It can give proof to the world of the direction in which its own development is proceeding.

Guiding Factors of the Ateliers-Ecoles

There are three guiding factors necessary to the success of new educational institutions: a clear conception of a humane, unselfish purpose, a courageous practical beginning on a small scale and a continuity of experiment allowing of constant adjustment and improvement. These three rules have been illustrated by the practice of the Ateliers-Ecoles.

Its aim has been to bridge the dangerous gap between school and life; to perpetuate the effects of school training, still present in the minds of the scholars, by giving them the forms and reinforcement of the realities of occupational life.

U. OF ILL. LIB.

Its method of elastic experiment and adjustment has the co-operation of both teachers and parents in the different schools; but is, above all, rendered productive by the General Management, in the hands of M. Lomont. The task is greatly assisted by a careful documentary record which extends over a period of years. This is based upon the records of the individual pupils; it is added to by contributions from the different school stages and units, and it finally emerges in the form of annual reports accessible to the public.

The Training of Apprentices

The small and courageous start was made in the year 1921 by taking over the private pre-apprenticeship school founded in 1906 by M. Kula, the first to bear the name of Ateliers-Ecoles. One of the most energetic and outstanding personalities of this undertaking, M. Gaillard, stated at the time: "The pre-apprenticeship is the supplement to the Elementary School. The training of apprentices is a matter for the various occupational branches, the pre-apprenticeship training concerns industry as a whole." Even at that early stage the question was considered whether wood, iron or soft sheet metal should be adopted as the material for pre-apprenticeship training. In practice, it was decided to use all three. Over-exertion and over-fatigue among the young pupils was prevented, not by using a material which could be easily worked, but by methodically supervising their work.

Shortage of Ability in Rising Generation

The reason which led the Chamber of Commerce of Paris to impart new life to this old school was the ever-growing shortage of real ability in the rising generation. The industries were urged, if they required apprentices, to obtain them from among the pupils of this institution, those who had spent one to two years after leaving school in these apprenticeship workshops. The movement was assisted by the fact that the school age in France extends in practice only to the thirteenth year, and that a capable scholar can leave school at the age of 12 provided that he has obtained a certain diploma. The Ateliers-Ecoles aimed, therefore, at first, at filling in the time between the twelfth and fourteenth years. To-day they recognise that even the fourteenth year is too early to enter an industry or trade in its present form, and that it is essential to fill in the time until the pupils reach 15 or 16 years of age.

The best proof of the value of an experiment of this kind lies in its practical effects. The effect has been that employers are increasingly anxious to engage apprentices who have undergone this pre-apprenticeship training, and that so far the Chamber of Commerce in Paris has had scarcely any difficulty in finding permanent positions for all its pupils.

Effect of New Institutions on Apprentices

The new President of the Commission of the Chamber of Commerce for the Ateliers-Ecoles, M. M. H. Harle, stated when he took up his duties in 1933, and was reviewing the work of the Institution during the past twelve years, that :

> " Personally, I regret that economic conditions do not enable us to extend the work of the Ateliers-Ecoles in the way in which I should desire. If the number of pupils whom we supply every year to workshops and businesses were greater, a perceptible change for the better would be speedily apparent in the spirit of the workers. Our young people leave us imbued with the consciousness of the duties which await them, of the necessity for strict conscientiousness in their occupation, with an increased all-round education and with habits of discipline, self-respect and moral feeling. This all serves to create a demand for them, as much on account of their personal qualities as on account of their abilities and their occupational training."

This is a striking testimony from one who occupies a leading place in economic life, in which the leaders are otherwise all too ready to criticise educational institutions.

At the same time, it gives us another indication of how the large funds once released in the future by a general policy of disarmament could be employed productively and to the promotion of employment. If instead of 2,500 pupils, the Ateliers-Ecoles in Paris were able to take ten or twenty times the number of students, a great human and technical advancement would be ensured.

Syllabus of Ateliers-Ecoles

The example of this first school, taken over in 1921, was soon extended to a number of other schools ; and small, individual schools were later combined into larger units. To-day the Chamber of Commerce has nine schools situated in different parts of Paris, two for girls, six for boys and one for both sexes.

The two girls' schools are preparing, the one for the feminine clothing industry (tailoring, high-class dressmaking, fashionable embroidery, lingerie-making, corset-making, dyeing, cleaning furs and feathers, hairdressing), the other for salesmanship, subdivided according to the various special trades.

The mixed school for boys and girls teaches stationery, cardboard box making, bookbinding and the making of leather goods and travelling requisites.

The six schools for boys comprise : salesmen, shop-window dressers, the building industry (masons, locksmiths, signwriters, marble-workers, ceramics) ; ironwork (mechanics, smiths, foundry, electricity, bronze, motor-car, small machines, surgical instruments) ; woodwork (joinery, cabinet-making, model-making, parquet flooring) ; decorators ; printing industry (letterpress printing, lithography, photogravure) ; clothing industry ; hairdressing ; foodstuffs and catering industries (butchers, bakers, sausage-makers); kitchen (pastrycooks, grocers); agricultural handicrafts; gardening; hydraulic engineering.

Grouping of Activities of Economic Life

It will be seen that the Chamber of Commerce has grouped the most important activities of economic life to be found in and around Paris, and has focused them in its schools. The adjustment to practical requirements is thorough and complete.

To learn something more of their methods, we shall assume that we are visiting one of these institutions—that of an occupation for which Paris has gained a world-wide reputation—the School of the Catering Industry.

The School of the Catering Industry

This school is at 16 Rue de Terrache, a small side-street near the Gare de l'Est. At first the visitor sees nothing but a large bakery, a butcher's shop, a sausage factory, and a kitchen arranged on genuine French lines. The roast meats, the *hors d'œuvre*, the entrée and cakes, each have their own chef. A glance suffices to show that the chefs are experienced masters of their craft, and not a chance mixture of handworkers and teachers. They are engaged for, and can be dismissed by, this school in exactly the same way as in an hotel. They are surrounded by dozens of smaller cooks, bakers, butchers, all wearing the costume. The youngest of these are 12–13 years of age, the few elder, 17–18. In the majority of cases the institution confines itself to pre-apprenticeship training; but in recent years it has also given to a small number of students complete apprenticeship training until they become journeymen.

Every boy spends about six to eight weeks in each department of the catering school. He gets to know the various techniques, the rules and the customs of the trade, at least superficially; and he learns them, not from a book, but from a master.

These masters are, now, teachers in the full sense. They are masters of the theory, as of the practice. They understand the art of accompanying their actions by explanations, and of stimulating interest. Six hours a day are devoted to manual work and two hours to instruction. This latter is given by professional teachers, and includes French, arithmetic, composition, letter-writing, designing and drawing. The instruction given is always associated with the "occupation."

In addition there is physical training. The gymnastics and rhythmic exercises are on a scale, and taught in a form, superior to those in other French schools. They are designed to make the young people healthier, freer and more self-confident.

The decisive factor, however, is that all the handwork done in these schools is done with a purpose. Everything produced is not simply made as a "model," but is immediately made use of in practice. For example, in this Catering School, everything baked, kneaded, moulded, boiled or roasted, serves a practical purpose. The school not only feeds itself, but also large schools in the surrounding district. The food is better and more varied than the ordinary food of the people, because it is the task of the young craftsmen to try every variety. Twice a week, for instance, the very diversified *hors d'œuvre*, popular at French luncheons, are supplied. Occasionally, also, the young craftsmen are given an opportunity of testing their skill on bigger problems ; and visitors to the school are invited to partake of these experiments, seated round a skilfully laid table in the middle of the schoolroom. At such a meal one may find oneself seated between the master butcher of the city of Paris and the master of some other guild connected with the catering industry. For it is *their* school, and the pupils who wait at table, carry and serve, know that they, too, may have the chance some day of sitting at the same table as a master or chief master of their own craft. In the same way, class distinctions disappear, and chief masters meet as a matter of course on equal terms with the directors, professors and others. Again, the quality of the food served in such a schoolroom is as good as that in any of the famous restaurants in Paris ; and the visitor learns that it is not an abstract paper knowledge of the culinary art here given, but a practical mastery. He may feel no little confidence that from among these dozens of small cooks will emerge the future world-famous French chefs.

Just as the culinary art is taught educationally in this school, so are metal-working, woodwork, building work, gardening, dressmaking, tailoring, etc., taught in the other schools. In all, a craft training is given, in practical workshops, and under the supervision of teachers selected by the guilds and corporations. These teachers are made up of first-class craftsmen, who have never lost touch with the practical side of their work, and of fully qualified school teachers, who deal with the theoretical aspects.

Organisation of Ateliers-Ecoles

The school as a whole is under the direction of an experienced schoolmaster. The director-general of these schools, M. Aristide Lomont, is assisted by a committee numbering among its members many eminent representatives of all the occupational divisions of commerce and industry in Paris. Practical experience and theory, youth and age, teacher and administrator, are associated in unusual harmony.

The Preparation for Apprenticeship

The intention underlying this education is not to replace apprenticeship training, but to prepare for it, and to prepare for it better than an ordinary school can. It is assumed that a pupil has, often from the outset, a bent or inclination for some particular trade, say, for metal-working. How—say the experts at the Ateliers-Ecoles—is it to be decided whether this is the right trade for him, in preference to others ? In their view psychological tests are deceptive. They mistrust the theoretical adviser in matters of vocational guidance who, at intervals of a few minutes, inspects young people rapidly one after the other. They regard occupational guidance as a process necessitating slow and thorough testing. The pupil's real bent, subjective or objective, can only be ascertained by practice in the work itself ; and this work, therefore, must be organised so that any change, or changes, in the pupil's special study shall not interfere with his receiving a continuous life-training. As a part of the system, consequently, the apprentice pupil spends at least a year in being guided through a variety of different classes of handwork and specialities of the metal trade. His versatility is tested before his real, thorough training begins. This last must be always specialised in character, and concentrated rather than wide in scope.

At bottom, such a system is aiming at producing a power of self-criticism and of self-determination. The best way for a young pupil to discover whether he is suited for a particular trade is by the pleasure which he takes in his work for it, and by the success he obtains in it. Of this he is himself the best judge.

Elements contributing to self-deception, further, in such self-determination are corrected by a careful system of checking. This will be described later on. At this point we must mention a method deserving of attention in the Ateliers-Ecoles.

The Value of Practical Work

A report quotes Henri-Dubreuil[1] as saying that the important factor to-day is so to equip the workman that he can live just as naturally under changing conditions as his ancestors did under a tradition : " Apprenticeship training must be conducted in such a way that in the end it enables the workman to change his occupation." Here we have a radical break with existing tradition ; since, hitherto, a change of occupation has been regarded as implying personal failure. It is the times in which we are living that have radically changed this view, and it is well that we should realise it. It is a new doctrine, and it is one expressly emphasised by the Ateliers-Ecoles.

> " Why have we made practical work in several basic occupations the basis of the choice of an occupation ? Because the facts have proved to us that the best pupils are those who have handled the most varied materials, the most divergent types of tools. Physically and intellectually, they are the best.
>
> " Physically, because the body is developed as a result of bringing as many muscles into play as possible, and because the muscles are rendered supple in a variety of ways ; thus obviating the deformations which

---

[1] *Op. cit.*, page 55.

almost inevitably ensue as the result of constantly repeating the same movement in one and the same occupation.

> " Intellectually, because the pupils are trained to observe and think over problems covering the widest possible range and because the result is mental ' gymnastics ' similar to those which we have mentioned for the body.
>
> " Occupational training of this kind forms well-balanced men and women, who are capable of offering far greater resistance to the circumstances of life and of adapting themselves very quickly to new situations. A mechanic, who has never worked with wood, displays incredible awkwardness if he is asked to use a saw or a plane, even as the joiner who is suddenly called upon to use a file and chisel.
>
> " If such observations can be made in ordinary life, how much more important must they be in times when, as to-day, one must be prepared to tackle any work, no matter what it may be ?
>
> " In every trade, a man may be suddenly confronted with the necessity of doing something different from what he is accustomed to do. The training which we give to our young people prepares them for such contingencies, and, by developing their capacity, equips them effectively for life. Is not this the true purpose of the period of apprenticeship ? A man's work must enable him to live under any external circumstances, both under the normal conditions of his industry and under the abnormal conditions when that industry no longer provides him with the means of earning his livelihood.
>
> " Therefore the apprenticeship period must make provision for the possibility of a change of occupation.
>
> " At the Ateliers-Ecoles we provide for this contingency, during the period of occupational guidance, by the divergent kinds of handwork which, at first sight, appear to have no connection with each other. We continue it during the apprenticeship training proper, by regularly interposing ' general house-work ' sections or other accessory work, which makes the muscles supple, develops the intelligence and accustoms the pupils to act on their own initiative.
>
> " To develop all the faculties from youth onwards, to prepare the man for it by training, while the industry, as the teachers say, remains the centre of interest, that is the remedy which we offer against the crises due to a change of occupation, a change which is more on the surface than deep-seated. The apprenticeship is not confined to one industry but extends over life as a whole."[1]

This is a most interesting theory, and one which will have to be reckoned with. It is not a mere figment of the brain : it has been tested by long practice in dealing with thousands of cases.

Evidence for Success of Theory

That it has withstood even the severe test of the unemployment crisis is proved by the following evidence :

> " At the present time, and in spite of the crisis, we find situations for those who understand their trade ; we do not find them for the others. This enables us to say that in the majority of cases it is not the trade which should be blamed, but the individual, who has not taken the trouble to learn it properly. Even if such a man changes his occupation, he will experience the same disappointment in the same circumstances. . . . There was another fact which we were able to record : the workmen who are most easy to put back into jobs are those who have had the most extensive occupational training. A good machine-maker, for example, is

---

[1] *Op. cit.*, pages 56–7.

always in demand, because he can also be employed in nearly all the other branches of mechanics. But it is much more difficult to find a job for the specialised mechanic unless he has had a complete training as a machine-maker.[1]

" The training of an apprentice is an education. A brain cannot be trained in a few weeks, nor is it possible, without considerable effort, to master an industry simultaneously with manual skill." [2]

Regaining a Taste for General Studies

This, however, is not the only result achieved by the method of instruction of the Ateliers-Ecoles. Even during the school period, this serious many-sided manual training has another exceptional effect. We constantly come across reports to the effect that young people subjected to " the discipline of the Ateliers-Ecoles regain a taste for general studies," that the methodical manual work, carried out for six hours a day, does not fatigue or kill the thirst for intellectual study, but the reverse. The liking for study, which has often waned, suddenly breaks out again spontaneously. It is as though a convulsion had been relieved, or fatigued steel suddenly regained its elasticity after some special process, or as though a worn-out magnet had developed fresh attractive power. Examples are frequently met with in everyday life. We shall have to make a habit of observing this process during school life as well. A new tension of this nature often brings it about that pupils who have run away from a secondary school conceive a new desire for study and return to the school.

This regenerative effect is a remarkable and interesting phenomenon. It was not only discovered in Paris, for we find the same thing in rural central schools in England. But it is to the directors of the Paris Ateliers-Ecoles that the credit is due for having repeatedly drawn attention to it, and for having studied it thoroughly for the first time. " School fatigue " is the worst possible start for life. If it could be eliminated, schools would double their value.

---

[1] A remarkable confirmation of this is to be found in an article contributed by Werner Ohlbrecht to *Sozialen Praxis*, cited in the *Berliner Tageblatt* of October 6, 1936. He writes : " Even during his apprenticeship, the young business man seldom receives in a big undertaking the many-sided training such as a small or medium-sized business is able to offer. If the young business man is given a permanent position, he will be appointed to a post in one of the many departments of the business. The range of his duties is thus narrowed down ; he sees practically nothing of what happens in his department as a whole, much less in the business as such. In most cases, he does not get to know either the products or the raw materials or the process of manufacture at first hand. Once he has worked his way into his own position, he often remains in it for the rest of his life. When he is capable, and does his work efficiently, paradoxical though it may seem, his prospects of being transferred to another department are extremely small . . . because each departmental manager will only part with experienced independent men with the greatest reluctance. Thus it may happen that a man of no parts who is usually moved about from one department to another will, in the course of time, gain a far wider knowledge of the working processes and connections than his capable colleague, and if he becomes unemployed, his more extensive commercial equipment affords him much better prospects than that of the specialist."

[2] *Op. cit.*, page 55.

Prolonging the School Age

It is natural that the Ateliers-Ecoles should champion the prolongation of the school age. They argue as follows : " We have succeeded in getting the school age raised voluntarily in 12,000 cases. But we give the most emphatic warning against making the raising of the school age simply a mechanical extension, or even a repetition, of the same curriculum and the same teaching methods as the average elementary school."

This attitude proves once again that the demand for the raising of the school-leaving age, unless only a transference of the more highly gifted pupils to the higher-grade schools be intended, derives its value, not from any consideration for the calendar, but from the new programme of instruction. Without such a programme, it is likely to injure both the school and the pupil, and, above all, to interfere with the estimation in which the school education itself is held, and with the decision to continue a school training by subsequent self-education.

The Ateliers-Ecoles are equally convinced that the other alternative, that of sending out pupils at the ages of 13 or 14 into the unordered and mechanised industrial life of to-day, of allowing them to become unskilled and frequently unprotected wage-earners, deficient in physical, mental and moral strength, is equally harmful. It leads to a ruthless exploitation of body and soul, and the fact that families are driven to it is one of the most ominous of the phenomena of poverty.

Occupational Guidance

Further, to justify their system, the Ateliers-Ecoles have repeatedly drawn attention to yet another characteristic, their vocational guidance scheme. Since their beginning in 1922, this has been under consideration and experiment in them ; and in 1929 the title of the institution was altered expressly to : " Ateliers-Ecoles d'Orientation Professionnelle et d'Apprentissage " (for Vocational Guidance and Apprenticeship).

The main work in connection with this occupational guidance takes place in the school itself. Every piece of handwork entrusted to the pupil is strictly in accordance with a specified series of tests. The time spent on the work, the quality of the work and other remarks are recorded on the pupil's personal sheet. The master, who has never more than 25–30 pupils under his charge, records also on this sheet his own impressions of the " human " value of the pupil, of his diligence and his energy. From these personal records, we can learn that, in different departments and at different times, one and the same pupil will often perform the tasks allotted to him in an entirely different fashion, and that the various masters have formed totally different judgments of his energy and of the pleasure he takes in his work. Every expert examiner knows that such opinions are liable to subjective sources of error; but that, where objective valuations are in question, the sources of error are inherent in the pupil himself. Changing moods, changes in bodily feeling and inner co-ordination are particularly present during the years of transition. If the ordinary methods of examination are alone employed, these sources of error may mutually intensify one another, and produce disastrous results. In this, in fact, lies the weak point of every examination system which is based upon a single examination and a small circle of examiners.

Replacing a Static by a Dynamic Examination

The Ateliers-Ecoles have adopted the only possible remedy: they have replaced a static examination system by a dynamic. They do not test a single aspect of the pupil's output at a single given moment, but they endeavour to interpret the uninterrupted sequence of his work with the aid of a series of observers and examiners; and from this dynamic continuity they deduce their final judgment.

They find out at what time and in what occupation the curve of a pupil's output series reached its peak, subjectively and objectively. At this juncture they introduce their occupational advice. In many cases such advice is hardly necessary, because the pupil-apprentice, with the aid of the output curve, is his own best adviser.

Results of choosing Wrong Occupations

The resultant choice of occupation often differs from the original inclinations of the young pupil, and still more often from the ideas of his parents. Nevertheless, everything possible is done from the outset to pay regard to the pupil's original choice of occupation and to the reasons which led to it. A medical examination clears up the question of the physical suitability of an occupation, and the occupational advisers at the central offices pay thousands of visits every year to pupils' homes. The results of their advice are described as very satisfactory; and a number of trade unions have now asked the Chamber of Commerce to take over the entire occupational guidance and training of pupils during the pre-apprenticeship period.

The importance of really good occupational guidance cannot be exaggerated. It is vital to individual and to social welfare. Where it is lacking, serious disturbances are inevitable, for every "square peg in a round hole" is a potential source of increasing unrest. And yet the number of those who have to-day chosen a wrong line of occupation is legion.[1]

---

[1] In Germany alone, the Leader of the German Labour Front, the Central Authority for all labour matters, Dr. Ley, estimates the number of these occupational misfits at 3·5 millions (*Berlin Tageblatt* of September 30th, 1936).

To achieve a complete system of correct occupational guidance must remain one of the main problems of our society. But to the Ateliers-Ecoles the credit is due of having for the first time on the Continent, and in a large city, established a highly reliable method, and one which has been thoroughly tested in collaboration with practical industrial groups.

Relating the School to After-school Life

We have said that the Ateliers-Ecoles work on a system of experiment and observation, that their method is not a mechanical one, but human and personal, and that they realise that the experimental stage in an educational institution takes not years but decades. They stand, however, for yet another truth—that an education which is limited only to the school period, and which disregards the years that follow it, can produce only half results.

The life of school develops certain laws and forces in a man, different from those of the later, working life. But, in paying due regard to these latter, we should not set up artificial workshops or school communities imitated from later life, but see to it that we establish a concrete permanent connection of a personal character with the spheres of life in which the pupils have lived and will live, both backwards in their relation with their family and forwards in their relation to their future. At one time the small village school or town school did perform this function independently and naturally. But this natural function is everywhere on the wane, and in many cases has disappeared altogether. It must now be replaced by planning and by method.

Three Methods Employed

This methodical establishment of connection with the later working life is carried out in the Ateliers-Ecoles along three lines :

(*a*) The workshops are brought as near to reality as possible. They seek to embody a piece of real, productive working life in the school. Experienced craftsmen, still as a part of their calling, teach handicrafts. Experienced masters attend to the intellectual training. They function together, and not in competition ; just as brain and hand harmonise in a healthy body. Neither of them tries to replace the other.

(*b*) The industrial circles which absorb the apprentices are not only represented by an adviser, they are the fathers of the school, its supporters and proprietors. They can observe results, both good and bad, and themselves at once take the necessary steps to consolidate the good or root out the bad. The school can never for long run the risk of educating useless products : the means of correction lie within its own structure. Such a result could also be secured by other means ; but as constituted the economic function and the educational function of the school are, once more, organically interwoven.

(*c*) The school feels itself responsible for maintaining the connection with former pupils. It is, in fact, of the nature of a social laboratory. It observes and studies the future social problems of its students : it seeks to adjust the spirit and purpose of the school to later realities and, by education, to prepare the pupil of to-day for his to-morrow.

Education for Leisure

The working out of an agreement between " reality " and the spirit of school life is a problem of first importance. It is being attempted in many countries, but mostly with inadequate preparation, and without allowing for the fact that life does not proceed by leaps and bounds. Again, the task of preparing to meet the situations of to-morrow by education is being systematically attempted by the Ateliers-Ecoles. Many examples might be quoted, but one may be mentioned in conclusion, in order to demonstrate the method :

" There is a great deal of detailed discussion "—we might hear the Ateliers-Ecoles saying—" as to the future leisure of the worker, but little indication of a suitable solution. We ourselves are tackling the problem along practical lines. Leisure as holiday is not dangerous : it can be spent with relatives or travelling. Nor is it the week-end, which can be spent in walking or games. The danger lies in the daily leisure hour when one does not know what to do. For this, reading is proposed, and encouraged by good libraries. But a man who works hard cannot read every evening, so something else must be found. Why should not a man acquire the habit of putting his house in order, and in so far as may be possible, of beautifying it ? To train such a habit we adopt the following plan. Every Saturday morning is devoted by the entire class, under the direction of the professors, to a thorough cleaning of the school ; and, while doing this, the pupils are learning to do everything that may be likely to need doing in a home ; such as fitting a window-pane, paper-hanging, repairing locks, etc. The method is proving successful. Parents are already telling us that they can observe the effects in their homes. In a few years' time it should become a widespread social custom.

" We are seeking a method to deal with another ' leisure ' interval. This is the ' loisiers du repas,' the leisure hour of mealtime. Too often it has disappeared. It has become a practice to eat ' on the run.' The father hurries away because the atmosphere of the home table gives him neither recreation nor rest ; the children gobble their meals in order to escape to their friends.

" Here we have the need for a new habit. We must seek by advice to awaken consciousness and a mutual responsibility ; so that families may jointly organise their mealtime hour, and make it pleasurable. The meal itself will then again become a part of the workman's due ' leisure,' his moment of relaxation, and his opportunity for conversation and influence upon his family."

Such schemes, or methods, are concrete, and close to reality. While the world is echoing hollowly with vast new and very often artificial schemes for " leisure," the plans of the Ateliers-Ecoles base themselves on a small inner core of life, upon the family, the home, upon the small adjustments and the quarter of an hour here or there. The right use of such leisure may bring in an unexpected harvest, in increased happiness.

We are all seeking some new way to this same end. The Director of the Ateliers-Ecoles, in conjunction with his collaborators and the Paris Chamber of Commerce, is working out a new and interesting method, beginning from the inside of life, and not from the outside.

CHAPTER SIX

FRANCE: VOCATIONAL TRAINING AND LEGISLATION

The Laws of 1892 and 1900 on Child Labour

THE history of the French vocational training system furnishes two excellent examples of the extent to which forceful legislation is capable of exerting a good or bad influence on matters educational.

The first example is furnished by the law of November 2nd, 1892, relating to child labour.[1] This law provided that, as a rule, no children shall be employed in factories, mines, quarries or workshops until they have completed their thirteenth year, but that they may be so employed at the age of 12 if they have obtained a school-leaving certificate. The factory inspectors had, moreover, the right to demand the dismissal of juveniles under 16 years of age from undertakings in which the work was beyond their powers.

The second law of March 30th, 1900, provides that juveniles under 18, and also female workers, may only work ten hours a day, whereas formerly, under the law of September 3rd, 1848, twelve hours' work was allowed. The law now provides, moreover, that each business which employs juvenile or female workers must reduce the twelve-hour day to ten hours, not only for these categories of workers, but generally for the whole of the staff employed in the works, without exception.

Both laws were intended to humanise industrial labour, but in actual practice their effect was to make an ever-increasing number of factories cease to engage juveniles under 18 or to train them as apprentices.

Under the law of 1892, the employment of juveniles led to the appointment of Factory Inspectors, who, however, had no legal right to inspect the factories or to concern themselves with the undertakings. Under the law of 1900, the employment of apprentices made it compulsory to reduce the number of hours worked throughout the entire works from twelve to ten. This proved an onerous burden against competitors who took no apprentices. Some factories started employing only juveniles, as a result of which, however, the training of apprentices was again rendered impossible.

The training of apprentices in France had already passed through an extraordinarily severe crisis. The suppression of the Guilds as training centres, without replacing them by something on similar lines, had proved very harmful to the apprenticeship system, which was in a very bad way.

---

[1] The material for this report was taken in particular from the book by P. Astier and I. Cuminal: *L'Enseignement Technique Industriel et Commercial en France et à l'Etranger* (Paris, Librairie des Publications officielles du Bulletin des Lois et des Sciences Economiques et Sociales, Georges Poustan).

These two legal enactments proved the death-blow to the apprenticeship system, which gradually disappeared from the industrial structure of France.

Results of Suppression of Apprenticeship System

This suppression of the apprenticeship system had many catastrophic consequences. Criminality among juveniles increased to a disproportionately high figure ; its rate of increase was many times that of criminality in general. Youth became dissolute. It is said that even the language began to show traces of this dissoluteness ; the taste for beauty and order began to decline.

More ominous still were the consequences for industry itself. In *L'Enseignement Technique Industriel et Commercial en France et à l'Etranger* (page 16), P. Astier and I. Cuminal report a statement made by an industrialist : " . . . it is the complete ruin of a large number of French industries, for example Metallurgy, within a period which will not last more than 20 years, that is to say, by the time the workers who are now between the ages of 30 and 35 have disappeared."

Under these circumstances it is not surprising that many industries had to recourse to foreign labour, which they obtained more particularly from those countries where the apprenticeship system was still an active factor, either in the patriarchal or the new institutional form. In some trades the number of foreign workers amounted to as much as 80 per cent. of the French workers employed. Before the outbreak of the present crisis, the number of foreign workers had risen to about 1·2 millions ; in 1905 it was reported from Lyons that the majority of skilled workers in the electricity works in France were Swiss, who had enjoyed an excellent training in their own country.

The Astier Law of 1925

It is understandable that this situation has frequently had a disturbing effect in French industrial circles. The only possible solution was a revival of education, but for that purpose it was first necessary to prepare plans and to find a legal basis. During the war the proposal was made in circles connected with the Paris Chamber of Commerce to promote the training of apprentices by imposing an apprentice tax, the so-called " taxe d'apprentissage."[1] This idea only took shape, however, in the form of legislation seven years after the war had ended.

The French law of July 13th, 1925, contains the provisions which are known as the " Astier Law " (see G. Gaucher and R. Mortier, *Code de l'Enseignement Technique*, pages 12 *et seq.*).

[1] Paris Chamber of Commerce : *Les ateliers écoles depuis l'origine*, 1920, *jusqu'au* 31 *décembre*, 1934, page 5.

This law provides that anyone carrying on industrial or commercial work shall pay a special tax, the proceeds from which will be applied to meet the costs of technical instruction and of training apprentices, and also of scientific laboratories.

The law also lays down the manner in which this tax will be utilised, e.g. the training of craftsmen, practical schools for commerce and industry, vocational schools, occupational courses and any other institution intended for the revival of the apprenticeship system or for the preparation of children for commercial life, and also for increasing the efficiency and promoting the development of laboratories for both pure and applied sciences.

This object explicitly includes subsidies for the training of apprentices and the granting of advances to small employers who undertake the training of apprentices.

The amount of the tax is computed on the total sum paid by an employer in wages and salaries. The basis on which the tax is calculated is the contribution chargeable for workmen's accident insurance.

The amount of the tax itself, which varies from one year to another, is at present 0·20 per cent. of the total amount paid by a business in salaries and wages.

Firms or persons whose wages bill does not exceed 10,000 francs are automatically exempt from the tax. Partial or complete exemption can also be granted by the Provincial Committees for Technical Training, to employers liable to the tax who can prove that they have adopted measures, either in their own business or as members of an association or of a Chamber of Commerce, for the purpose of promoting technical education and apprenticeship training. In this connection, only the following items are taken into account:

(*a*) The costs of professional and technical courses in the different grades;

(*b*) The salaries of technicians who, to the exclusion of any other occupation, are engaged in the training and guidance of apprentices, either singly or in groups, with a maximum of one technician to ten apprentices;

(*c*) The wages which are paid to apprentices during the first ten months of their training, in so far as they are subject to a systematic programme of training, or for the hours during which they attend vocational courses;

(*d*) The costs of the supplementary undertakings in connection with technical instruction and apprenticeship training.

When considering applications for exemption, the Provincial Committee on Technical Instruction calls for the views of representatives of the undertaking who are prepared to give them.

It is possible to appeal against any decision to a permanent Commission of the Provincial Committee for Technical Instruction, whose ruling is final and binding.

This law, which thus sets aside $\frac{1}{5}$ per cent. of the wages paid by the majority of industrial undertakings in France, for the training of apprentices, had an income in 1932 of approximately 158,000,000 francs (i.e. about £2,000,000 at the old rate of exchange, and £1,500,000 at the new rate).

This sum is devoted to technical training and the training of apprentices, as a corollary to other private and public funds.

It is not, however, used solely for public institutions, but also for private undertakings, although under Government supervision. Herein lies the novel and unique feature of this law.

Out of this sum of 158,000,000 francs, an amount of 69,000,000, instead of finding its way into the State treasury, is used in its proper place, in other words, in the works themselves for the purpose of the technical training of apprentices.

The responsibility for seeing that this is done, to what extent and with what results, rests with a Committee of experts, known as the Provincial Committee for Technical Instruction. To this Committee details have to be furnished regarding the entire training, the methods, the staff engaged, the costs and the results achieved.

The Committees have the power to refuse exemption from tax if they are not satisfied. This acts as an incentive to improve the training system and to organise it in such a way as to ensure that it actually serves its purpose, i.e. to furnish France with a future generation of good technicians and craftsmen.

This law, however, goes even further. In small businesses which are particularly well suited to the training of apprentices, advances are made for that purpose, and in fact subsidies are even allowed for the apprentices themselves.

This fulfils a basic requirement, which it is essential to impose in all cases where a one-sided system of subsidies tends to divert all the best scholars to intellectual studies, and hence into the intellectual professions of all kinds, and which affects not only the intellectually gifted pupils, but also those possessing manual and practical gifts.

The inevitable result of such a one-sided system of subsidies is that after fifteen to twenty years the professions supplied by these intellectual methods of education, such as those of clerks, lower, middle and higher grade officials and teachers, as well as the liberal professions, become overcrowded, while the demand for good tradesmen and craftsmen cannot be satisfied. This overcrowding of the intellectual professions also entails, in the majority of cases, an inner crisis. Many of those engaged in these professions are inwardly dissatisfied with the abstractness and the tediousness inevitable in the various branches of these professional groups. The resultant unrest is enhanced by the ever-growing lack of prospects as regards advancement and earnings in many of the intellectual liberal professions.

Both these factors lead to social unrest, which is likely to develop into a political danger.

If the majority of good scholars had also been given a chance, by means of a two-way subsidy system, of entering the practical manual professions, many of them would have been in those professions to-day, whereas, as it is, there is on the Continent a general complaint of the shortage of good skilled workers and foremen. They would have been in their true sphere, convinced of their intrinsic value, and in many cases would be far better off as regards earning capacity, than in any other profession.

The desire on the part of political leaders to avoid these dangers is nowhere more apparent than in the provision of subsidies for ensuring a thorough undisturbed technical apprenticeship training, and especially so in the granting of subsidies for craftsmen and skilled workers who are desirous of continuing their studies.

The Revitalisation of Technical Education

Every law has two texts, one apparent and the other concealed. The latter is often the more important of the two ; in its outward aspect a law may seem strict, clear, logical, benevolent, intelligent, and humane ; according to legislative standards it may be correct, free from defects and gaps. In its application consequences are often revealed which were never dreamed of by the abstract, unworldly legislator : the concealed text becomes stronger than the apparent text. Unintended and undesired consequences arise which are frequently in direct contradiction to the apparent text and finally nullify it.

Numerous situations of this description have given rise in many Continental countries to that intense, passionate antipathy to the abstract legislator, to the domination of the logical jurist, who has, indeed, brought about such fatal results in so many administrative departments and even in connection with the schools. " Fiat justitia pereat mundus " : justice above all things, even though the world thereby perish. This saying has proved apposite in many cases like the present one.

In many countries, however, the tendency of human reaction has gone even further. It has been directed against rigid forms of legislation and against the legislative conception itself, and has implemented the preliminary conditions for experiments and the elimination of laws, based solely on the subjective sense of justice and the intuition of the people.

There is no better remedy for such serious diseases of the legislative body of a country than the example of genuine, intelligent, highly effective laws.

Notwithstanding all the resistance which was raised at first to the Astier Law, those connected with education have to admit that it is a good, vital and genuinely effective law.

Its tendency is far more than merely humane : it does not create a bureaucratic State monopoly ; on the contrary, it seeks to promote and vitalise private initiative. It does not, like so many other vocational school systems, regard private initiative askance, but by means of the freedom which it affords, its prizes and subsidies, it does everything possible and conceivable to arouse this initiative.

Such laws or school enactments are to the educational scientist what certain minerals, which by their presence point to valuable deposits of ores and oil, are to the geologist. Such a law must of necessity lead the educational scientist to the realisation of the efficacy of genuine and vital educators in matters of legislation.

The technical school system in France has been fortunate in attracting such personalities. It is a domain in which we shall witness many remarkable things in the coming decade. At all events, the days when France, in so far as technical education was concerned, was, as it were, living in darkness are definitely over.

There is, however, another aspect : technique and handicrafts are once more finding in the youth of France an ever-growing inner receptiveness. The new type of wiry, sport-loving young Frenchman, seeking after realities, is in process of preformation in its favour ; he is beginning to seek something which will counteract one-sided intellectualism.

The Organisation of Technical Education

At the same time the technical education system is in the hands of a specially organised department of the Ministry of Education, with a degree of independence in keeping with its great importance. This department has abandoned the old conception of bureaucratic uniformity. It no longer seeks, as it were, to dictate everything from one and the same angle.

The old saying that the official at the Ministry of Education in Paris need only look at the clock to be able to say exactly what chapter of Plato is being read in the top form at all high schools at that particular moment, does not apply to this department.

In this special department for technical training there prevails an intense tradition of personality. The present head of the department, M. Luc, is an educationist of exceptional attainments. At heart he is a philosopher ; he came from the famous Ecole Normale Superieure, that great nursery of French genius which produced such great realists as Pasteur and Bergson, Herriot and Péguy and Jean Jaurés ; Luc is one of them. He knows that educational institutes, like plants, have need of a great deal of freedom, but he realises, too, that technical education in France still has a vast amount of leeway to make up. He does not regard it merely as a special branch of a special school, the school of the craftsman. He means to make it flourish once more in the midst of the life of the nation ; art and folk-art are to be closely related to it, and it is to be on terms of friendship with higher intellectual education. Nothing is more fertile of good results than friendship.

CHAPTER SEVEN

DENMARK AS AN EXAMPLE OF THE INTENSIVE EDUCATION OF A PEOPLE

A. THE CULTURAL BACKGROUND OF DANISH EDUCATION

THE secret of Denmark is the doctrine of inward expansion. When, after more than a thousand years of warlike tradition, Denmark was defeated in 1864 and lost the Duchies of Schleswig-Holstein, it abandoned the spirit of revenge and made this principle the *leit motif* of its future policy : that which had been lost outwardly must be made good within. Since that time Denmark has abided by this rule of the art of peace.

Neither coal nor ores were available, however, to assist in this inward expansion, none of these things being found in the soil. In natural resources Denmark is a poor country : it has no water-courses to provide a means of electrical power ; its highest mountain, though it bears the proud name of the " Heaven Mountain," rises only 100 metres above sea-level. Its northerly situation, commencing in the same altitude as Newcastle, affords no scope for the richer harvests of the south. For many of the needs of its industries and of its daily life, its only recourse is to imports.

Accordingly, Denmark's only hope was to raise the standard of the " raw material " available in the country, that is to say, the people, to the highest and most valuable level. The only way, however, in which this raw material can be developed is by education.

Denmark owes its present position to education alone. The foreign observer sees with astonishment and genuine admiration how happy and harmonious a poor, ill-found country can become as the result of education, provided it has the right leadership and adapts itself to humane precepts in every sphere of life.

This impression is intensified the more closely the Danish people are observed. Their genuine humanity as a people is not an accidental attribute : it is the effect of a system of education which goes back more than a century, and which differs both in principle and form from anything to be found in other countries.

The Influence of Grundtvig

The development of Denmark is closely associated with the name of a single man, Nikolai Frederik Severin Grundtvig (1783–1872). Towards the end of the eighteenth century, while still an adolescent, he became inspired by the German idealism of Fichte and Schiller. He was initiated into the teachings of Romanticism by his relative Steffens ; and manhood ripened the seeds.

Between 1828 and 1831, during a long stay in England, the English tradition of freedom made a deep impression on him; but it was only in later manhood, after 1844, that he was enabled to see the results of his work beginning to bear fruit. He was married for the last time at the age of 70; and retained the freshness of his faculties until he died, in his ninetieth year, a venerable seer, still alive with the vital flame, such as we may see in a vision of Blake's. Even to-day his personality is still alive throughout the whole of Denmark, that of a great, happy nordic Christian. Rarely can a man realise his own ideals so closely. Grundtvig sought to revive the power of tradition both in the nation and in the individual, and so to rekindle moral force. What Romanticism looked to poetry to achieve, he made reality; what he learnt from the English tradition of freedom, he converted into action; he exemplified by his life the message of the Prophets.

Grundtvig compared with Thomas Arnold

It is fascinating to compare him with Thomas Arnold. It is as if the spirit of the age had equipped two like men with the same spirit, and confronted them with the same problems. Both were Christian Radicals, in the full sense. Their hearts sympathised passionately with the needs of the poor. German idealism influenced both alike; and the same seed which became choked under the reaction of the German Princes led by Metternich, could bear fruit in the freer atmosphere of England or Denmark. Thus, both Denmark and England witnessed in this period the growth of that deep feeling for a realistic humanism, the love of the living unit of homeland and people. Thenceforward, the secession of the working classes from the national unity has become, to all intents, impossible in either country. A mutual inner affection binds their peoples. And Grundtvig and Thomas Arnold were both leaders in this development.

What Arnold wrote of England, in 1839, Grundtvig could have said of Denmark—"If old England perishes, there perishes the most active and noble life which the world has ever yet seen, which is made up wholesomely of past and present, so that the centuries of English History are truly bound each to each by natural piety."[1] Grundtvig's enthusiasm was similarly devoted to the land of his birth; the progress of its history was for him the principal lesson to be learned by its future generations. Neither of the men was, however, in any sense a reactionary. They worked wholeheartedly for the future. Social justice for the needy classes, and the defence of an inward as of an outward freedom, were the Alpha and Omega of their teaching. They aimed at making love of homeland and of people the mainspring of youthful emotion and action. Had Arnold lived to realise his early strivings in the later half of life, and to devote himself still more to the social problem, the resemblance between the two men would have stood as a great historical reality.

---

[1] Letter written by Thomas Arnold from Calais, August 7th, 1839. A. O. Stanley, *The Life and Correspondence of Thomas Arnold* (London, 1852), Seventh Edition, page 680.

Grundtvig compared with William Blake

Grundtvig lived to be more than a teacher, and an educational reformer, with a special power to inspire youth. He possessed prophetic traits that once again remind us of William Blake. Blake's words might have been those of Grundtvig, when he sings,[1] "The Daughters of Memory shall become the Daughters of Inspiration. . . . Rouse up, O young men of the new Age! . . . Believe Christ and His Apostles that there is a Class of Men whose whole delight is in Destroying. . . .

"I will not cease from Mental Fight,
Nor shall my sword sleep in my hand,
Till we have built Jerusalem
In England's green and pleasant land."

This might have been sung of Denmark, and by Grundtvig, by the younger world of Denmark to-day. For we shall not understand the development of Denmark unless we perceive in Grundtvig a combination of a Danish Thomas Arnold and a Danish William Blake, and one who was able to carry on his joint personal impulses until his ninetieth year.

Grundtvig's Two Doctrines

Grundtvig chose as the subject of his educational work countrymen from the simplest classes, particularly young peasants between 18 and 25. These he inspired with his two doctrines—that of the "spirit of the people" and that of the "living word." The "living word" meant for him that personal inspiration which can pass from teacher to pupil, and kindle a living flame. He saw education not as a circle, the entire circumference of which revolves about the centre-point, the child: he saw it as an ellipse, a figure possessing two central points, the teacher and the pupil. For him, the teacher was an instrument of a higher power, an initiator, a *persona* in the ancient sense; through whom flowed the kindling force from another world, to be transmitted by means of the "living word." He was the sworn enemy of all mechanical instruction, of any mechanical accumulation of knowledge; and he launched repeated and passionate assaults upon the higher grade and elementary schools of his day. School examinations, textbooks, arithmetic tables, were all anathema to him. A teacher according to his ideas should begin the instruction with inspiriting singing; he should teach in the form of intensely vivid lectures, associated with living incidents, and with examples from the great stories of the world and the sagas of his country. So doing, he must appeal, not to the understanding, but to the soul. Learning by heart he condemned; but, when the teacher felt the "living word" awakening within him, he might rest assured that it would be remembered, and bear fruit.[1]

---

[1] "Milton, a Poem," Preface in *William Blake*, edited by Geoffrey Keynes, 1927, page 464.

In the writings and conversation of people connected with the movement, we repeatedly come across the peculiar value attached to this "living word"; which, in fact, contains in itself the second fundamental reality—"the spirit of the people." For Grundtvig the reality of this spirit of the people was absolute. In it he saw the whole inspiration and the whole obligation of youth. Without it, he considered education to be futile folly. He felt himself to be called to make, as it were, a masterpiece, of the spirit of the Scandinavian people, for him the supreme conception. Seldom has an educationist been imbued with so sure a sense of the reality of his aim and of his methods.

We can better understand his conceptions, if we consider them as similar to religious experiences. German Romanticism was itself, of course, in its idealistic aspect, nothing but the transference of traditional fundamental conceptions and fundamental functions of Christianity to mundane problems. The first to make this transference was a small group of Swabian students, members of the old Swabian school of theology, the "Tübinger Stift"; men who, although then unknown, were destined to become the pioneers of German idealism—Hölderlin Hegel and Schelling. In Grundtvig, these discredited conceptions became once more the primary cause of an active Christian faith. In him were united two forces otherwise often separated—the Christian idea in its deeper philosophical aspect, and the fiery faith of the Jewish Prophets with their passionate longing for humanity, justice and brotherhood. Denmark to-day still lives on the results of that union. The vitalising force of the conceptions, adjusted to the spiritual needs of a newer age, still makes itself felt, even in circles far removed in their ideas from the teachings of Grundtvig, or from his direct creations.

B. THE DANISH PEOPLE'S HIGH SCHOOLS

Grundtvig's new creation was the Danish People's High Schools. They were started in 1844, and have to-day spread throughout the length and breadth of the country. These schools are attended every year by 6,000–8,000 young Danish men and women, whose ages range from 18 to 30. Two courses are given, one course for girls which is held during the three summer months, the other for young men in the five winter months. During these months, the young people live in groups of 60, 80, 100, or more, like one big family. No compulsion dominates the group, each one enters it freely. No examination is required on admission, nor does an examination lurk in the background ; with the result that there a genuine desire for knowledge survives. Apart from Oxford and Cambridge, no other example exists of such a close-knit, student community bound together by an old tradition.

---

[1] The following is one of many examples (taken from Fr. Nygaard: *Kristen Kold*, Odense, 1895, pages 216 *et seq.*—Kristen Kold was Grundtvig's chief collaborator). One of his pupils, Poul Rasmussen, relates, of the first Free School in Rysslinge, that no books were used; only speech. There was no learning by heart; but, without it, the children were able to tell the stories much better than before—"one felt the force inwardly growing."

On another occasion a young peasant said to Kold: "It is always a great pleasure to me to hear you speak; but afterwards I can no longer remember your words, I can no longer find them." "It does not matter," was Kold's reply, "they are in you and will grow in good time, even though you may not know where they are. When you sow wheat you do not know afterwards where it is lying, but it grows just the same." (*Op. cit.*, pages 219–20.)

All the High Schools are private institutions, the majority being owned by the Director. In Denmark, " School Owners " are in a class by themselves, one which carries even greater weight than land owners and factory owners. The entire cost—covering instruction, board and lodging—amounts to about 70–80 Kroner (about 60*s.*) a month, and is borne by the students themselves. These receipts cover all the expenses of the institutions, which receive only a very small State subsidy. For a few students, particularly those without all means, scholarships are available ; but the general rule is that the young people pay the entire cost of their high school training themselves. It affords another example of how an instructional establishment can serve its purpose, and yet maintain its freedom, with minimum fees and expenses.

The vast majority of the students come from peasant families, mainly small-holders. Most of the students pay for their high school training out of savings from their wages.

A Day at a People's High School

The day at a People's High School passes much as follows :

The students assemble every morning in the big lecture hall. Each lecture commences and ends with a song, taken from the ever-increasing number of traditional songs of the high schools. They are mostly of a religious character, or contain an admixture of folk-song and anthem, suited to stimulate a new enthusiasm for great historical ideals.

The singing is followed by a lecture, mostly taken from history—history treated as the connecting thread in the story of nations since the beginning of time. The lectures do not deal with single dates or controversies, nor are they intended to provoke the critical faculty. They suggest the standpoint from which each individual and the nation may better realise high ideals of humanity in general. The objection is often raised that the instructional methods provide only a half training. From the scientific point of view this may be so, but such a method of teaching history enriches the people's store of knowledge. It does not produce critical investigators, but it stimulates interest and admiration.

One often sees in the schools, which zealously cultivate the arts among their pupils, a picture showing Grundtvig's great pupil

Schroeder, seated in the professorial chair of the high school at Askow. At his feet are older men and women, also belonging to the family community of the schools. Before him stand the first row of the pupils, listening attentively. The spirit of inward concord symbolised is characteristic of all the schools. It is the same spirit which we read of in the Middle Ages, when scholars gathered about some unattached teacher of wisdom and modelled their lives on his precepts. Such personal relationship is equally a predominant factor in the high schools.

The second hour of the day is devoted to gymnastics. From the outset gymnastics have played an important part. Bodies, already perhaps stiffening with hard work on the land, regain in this way their natural suppleness. Danish gymnastics, which have been practised for many years in the high schools, are now world famous.

The next hour is mostly devoted to " Questions." The initiative here lies with the students. The teacher has to try to answer the questions put to him ; and they are not only concerned with present-day problems, but with the whole range of human knowledge.

In contrast to this, the Director again assumes control during the midday meal. He tells the students of important events at home and abroad, and adds his own comments. The atmosphere of a family predominates at such times.

During the afternoon, there are again lectures ; but their number is restricted to three a day. The subjects are taken from literature, mythology, sociology and natural sciences. No specialised instruction is given. If in later life the student retains the habit of reading books and newspapers with pleasure and understanding, of attending lectures or even giving them, then the aim of the instruction has been achieved. The student has become an active, thinking citizen, and not merely an imitative member of the community.

In the early days of the schools attempts were made from time to time to include agricultural instruction ; but they failed to achieve their object. This instruction has now been separated, almost everywhere, and the majority of men students attend such occupational courses during a subsequent year. In addition to the lectures, provision is made during the afternoon for individual or group work, in subjects such as Danish, writing, composition and mathematics ; or again small groups are formed to continue the discussion of some particular subject. Groups often form for the object of recalling or restating the matter of the lectures. The latter in particular is excellent practice for young men and women approaching independence ; since anyone who can write or express himself well has reached a new stage in development.

Of special importance is the reading of newspapers after the meal. Many students have, in this, an opportunity for the first time of reading journals other than those taken in their homes. In this way their circle of interest is enlarged, by comparison and by discussion.

The reading of good literature obtained from the school libraries supplements this. Too often it happens that young people cease to read when they lay aside their school books, sometimes for ever, sometimes until their distaste for school life has disappeared. But, thanks to the high schools, reading has become a characteristic of the rural population of Denmark. The Danish farm labourer who, when he changes his abode, is said to take a case of books with him weighing more than all his other belongings together, has become proverbial. Such a case of books will contain many of the best works in Scandinavian literature, one rich in new authors—Björnson, for example, who was one of the most powerful partisans of the new Renaissance of the peasantry, during the last decades of the nineteenth century. This renaissance was closely bound up with the teachings of Grundtvig, teachings directed to give the young peasant the self-confidence of the cultured upper class, without, however, making him discontented with manual work. They were largely successful. Although complaints of the best men emigrating from the country to the town are not entirely without justification, by far the greater majority of the young farmers have remained in the country. To this the far-sighted policy in the distribution of land and credits by the Government during the last few decades has contributed. It has led to the creation of more than 80,000 new small-holdings sufficient to feed their owners, and which are to-day one of the most important factors in the vast foodstuff-producing system into which Danish agriculture was converted after the crisis of 1880. It would not, however, have been possible without the spade work done by the high schools.

Need for Experience of Life before entering High Schools

One of the most important *decisions* in the history of the high school movement had to be taken at the very outset, between 1844 and 1850. Grundtvig's principal collaborator was Kristen Kold. He was trained as a village schoolmaster, but subsequently left the teaching profession on account of inner conflicts. He then became a craftsman and travelled through Europe and Asia. Kold was of opinion that 14 was too early for young people to leave school; and he wished them to pass, at that age, from the elementary school to the people's high school. Grundtvig, from the outset, held another view, that young people are only ripe for this second stage, or have a desire for things of the spirit, when they have had at least a few years' experience of life, and some practical training in their craft, notably in Agriculture. He attached great importance to the effects of this practical training. For this reason, he energetically opposed the suggestion to prolong the time of compulsory school attendance, introduced in 1814. After a short period of experiment, Kold admitted that Grundtvig was right. And since then the Danish high school has become one of the outstanding examples of the "training in life"; that is to say, a training not merely associated with school instruction, but built upon practical experience of life.

The Humanities as Basis of Curriculum

With an equal energy Grundtvig rejected the idea that this instruction should be occupational training, or directed largely to practical ends. On the contrary, he had a humanist's vision of learning for the sake of inward rather than outward attainment. This idea of abstract learning belonged to his conception of humanity and the Cosmos. He aimed at creating central ability, the creative function of the soul. The soul was for him the essence of the man. It responded to the vital centre of the cosmos in a mystic inner harmony ; just as, to use a metaphor of Goethe, only the " sunlike " eye is capable of seeing the sun. By means of history, poetry and mythology, he desired to awaken this central organ of man to its correspondence, and to a longing for action. The individual would ithus become a member of a cultural and economic community, enwardly prepared for genuine human collaboration, without hxternal pressure. For him the true life was the progress of history, history preserved in living form in the memory and in the veneration of men. This awakening of the soul was to be done by the " word," and he felt it to be the only way to redeem the Danish people from their impoverishment and despondency.

The majority, indeed, of the social classes in Denmark during the first decades of the nineteenth century were actually living under depressed conditions. The peasants and craftsmen especially, although they had for centuries enjoyed a certain outward freedom, had in reality been living under a deep sense of distress and of conscious inferiority.

This dark picture confronted Grundtvig when he compared the splendour of the romantic conception in the first decades of the nineteenth century with the actual condition of his people. But, unlike the majority of German Romanticists, he did not take refuge in the world of poetry, in that labyrinth, at the end of which, to use an expression of Mazzini, only the " Black flags of reaction waved." He kept steadfastly to reality.

The turning-point of his life, as we have said, was his visit to England. Why, he asked himself, is everything almost lifeless in Denmark, whilst the England of these days is imbued with a fresh spirit of enterprise and moving confidently towards better times ? He found the cause in the freedom with which each Englishman could live his own life and think his own thoughts. Like all those who come from the Continent, he developed a deep admiration for religious, civil and personal freedom. He recognised what the Romanticists had forgotten, that the mind can only develop fully in such freedom. He became a stronger partisan of freedom year by year, until his death. It was for him an essential element of a religious community : the conception of the Church implied the conception of freedom. " Freedom can no more be absent from the Church than the Spirit of God." [1]

---

[1] See N. S. F. Grundtvig, *Aaben Brev til en Engelsk Praest* (Copenhagen, 1839), page 27.

Above all else his conception of freedom led him to consider it imperative that the High School should maintain its independence of the State. Dependence must be incompatible with its nature as a living cell, from which the community life grows. All his followers steadfastly adhere to this principle.[1]

C. TWO OTHER DANISH INSTITUTIONS

The principle of the High School, of a five months' course in a residential private institution, is also applied in two other Danish institutions.

(i) The International People's High School

The first is the *International People's High School* at *Helsingör*, which was founded by Peter Mannicke towards the end of the war, with the help of Danish, English and German friends.

It was designed to establish connection between the countries then still at war, and it continues this function in times of peace. Workers and peasants from different countries live at this High School for weeks or months. Mutual understanding and many international friendships have resulted.

(ii) People's High School for Gymnastics

The second is the *People's High School for Gymnastics*, founded by Niels Bukh in Ollerup on the Island of Funen.

This vast school is very impressive. There is a stately hostel, athletic and games' halls of noteworthy proportions, and a swimming bath open summer and winter. The sports stadium is of full size, and the amphitheatre holds 50,000 people. The whole has grown up in a few years upon the quiet meadows of the island. The funds were obtained mainly by means of demonstrations given by Niels Bukh and his best teams in Europe and America. Large numbers of foreign students and especially Americans attend the courses. The main object of the School, however, remains to provide Danish peasant boys with a five months' thorough training in gymnastics. They pay for themselves, and the institution is maintained out of these small contributions.

The Curriculum

The curriculum offers the same general subjects as are taught in all the High Schools—the Danish language, literature and history. Special attention, however, is paid to physiology and anatomy, as well as to gymnastics. The life in this school is somewhat harder and the discipline stricter, reflecting the character of its principal,

---

[1] The Danish National Socialist Workers Party, in Point 6 of its programme of November 16th, 1930, stated: "We demand that the Grundtvig High Schools be taken over by the State and be restored to the spirit of their founder Grundtvig." (See Werner Haas' *Europa will leben* (Berlin, 1936), page 97.)

Niels Bukh. The afternoon and evening are devoted to systematic and free group exercises and individual training. In summer both the sports hall and the stadium are constantly at the students' disposal.

It is noteworthy that the young peasants, often of a heavy or slow type, soon become supple, well developed and graceful. Physical training is not, however, the sole object of the school, which aims also at developing a sense of fellowship. The students are intended to become missionaries of gymnastics and games throughout Denmark. They lead the younger peasantry in forming gymnastic and games groups. The voluntary gymnastic movement has existed in Denmark for many years, and the Grundtvig High Schools took a leading part in it ; but it has been much strengthened by the work of the school at Ollerup.

This voluntary movement, affecting those between the ages of 18 and 30, is a striking example of how a new physical discipline can be spread throughout an entire country, productive of strength, health and beauty. It illustrates the strength of a principle of voluntary propagation of formative ideas. Under it, strict discipline can be combined with absolute freedom.

D. THE POSITION OF DENMARK IN EUROPE

A genuine *system of education* should make a people freer, more prosperous, more happy. The Grundtvig system adopted by the Danish people has had this effect. Barely one hundred years ago Denmark was on the verge of despair. In 1880 Denmark again passed through a severe crisis, like that of the "hungry 'forties" in England. Agriculture, which until then had specialised in corn growing, threatened to collapse, as the result of the low-priced corn imported from overseas.

But to-day Denmark stands, in a Continent shaken to its foundations, a country with a population satisfied and occupied. A country also able, by means of public and private foundations, financially sound, to do more for social purposes, for insurance, education, housing, art, and science, in proportion to its size, than any other country in Europe. Denmark is the only country, except New Zealand, which has instituted an Old Age Pension scheme for all its inhabitants, without exception.

This change, from direst need to prosperity, had its origin in the sphere which Grundtvig termed the backbone of the people—in agriculture. Denmark's prosperity is founded on its export of high-quality agricultural products.[1]

Statistics

After deducting the imports of raw materials required for agriculture, and particularly for fodder, the net export surplus of agricultural products in Denmark in 1934 amounted to 795,643,000 Kroner.[2]

---

[1] For particulars, see *Danmark Landbruget* (Koebenhavn, Landbrugsraadet, 1935).

[2] *Op. cit.*, page xlvii.

(100 Danish Kronen = 92*s*.). Calculated per head of the 3,247,000 inhabitants, the income from abroad for a family of four persons, derived from the export of agricultural products alone, amounts to approximately 1,000 Kronen.

The figures become more remarkable when we learn that the production is not by large enterprises, but by 204,000 separate undertakings, only 2,438 of which can be described as being on a large scale, 82,032 being small-holdings of less than 10 hectares. Thus, the small and medium-sized farms play the major part, in a production which specialises, with a maximum degree of technical perfection, exclusively in milk and meat products.

Ninety per cent. of the milk products and more than 70 per cent. of the meat products come from enterprises combined as co-operative production associations. These associations not only control quality—which they guarantee to the buyer—but they have also taken over the packing, the sale and in the majority of cases the export. So that the whole of the annual profits obtained are divided among the members according to the total production.

This adaptation of the co-operative principle is one of the most remarkable features of Denmark. The young elementary schoolteacher from Thisted, in North Jutland, who, in 1880, told the story of the Rochdale pioneers to a few Jutland farmers in an inn, could never have dreamed what this was to mean for Danish agriculture.

The Effect of Education on Denmark's Progress

Those who know Denmark are agreed that the success of the effort in quality, production and of the co-operative system was due to the re-education of the people as begun many years before by Grundtvig. This knowledge may act as both encouragement and warning. The results could not have been achieved by the simple transference of the outer forms of the co-operative system, or of agricultural training.

Anyone who has watched the working of the Danish co-operative production and distribution machine will have discovered the educational values inherent in the co-operative plan. These values only exist when the co-operative method is applied, not only to consumption, but even more to production; when also it connotes " direct education," the education by life that the best of schools cannot indirectly give. Even in an unpretentious Danish farmhouse one may find, not only scientific works on agriculture and cherished numbers of agricultural periodicals (of which to-day Denmark alone has about 60 [1]), but even a laboratory, in which the stages of production are carefully tested, measured and weighed, and in which tables and statistics attest the scientific character of the work.

Two Themes in Danish Agriculture

In the history of modern methods in Danish agriculture, we repeatedly encounter two themes. The State, the Churches, the schools and public opinion alike seek to realise them, and they belong as it were to the unwritten basic principles of Denmark. They are the value of the *small-holding*, and the value of the *family*, not only in personal and public life, but as working economic factors.

---

[1] *Op. cit.*, page 55.

A country desirous of fostering small-holdings must see to it that high personal values are disseminated, not only among individuals, but also among the masses. This is only possible if the school, the indirect education, succeeds in arousing the very quintessence of the man, and if the forms and economy of direct everyday living respond to the high educational ideals established by the school.

The Foundation of Agricultural Education

On Grundtvig's principles the *foundation* of the agricultural education is practical training in life itself, commencing directly after the age of 14. The vast majority of the young agriculturists come from the small or medium-sized farms, where the owners are also the daily workers. On these farms the boys and girls receive practical training from the age of 14.

It frequently happens that on reaching the age of 17 they go to work on a farm other than that belonging to their parents. This second period of practical training on one of the larger farms (of which Denmark possesses about 2,000) is under the direction of experienced specialists, who frequently supplement the work on the farm, in the evenings or in the winter, by courses of a scientific nature.

As far back as 1830, an experiment was started with agricultural training schools. They were founded on the lines of the German agricultural schools, and particularly of the Thaer school. This attempt proved unsuccessful, and came to an end in 1870. In the meantime, from 1844 onwards, the Danish People's High School system had arisen, in the form of a private institution centred round a single personality. This form proved so successful that it superseded the State establishments, even those connected with agricultural training; and there are to-day about 20 large private schools, in which 2,500 young farmers are trained annually, in courses lasting five to six months.

The first of these was founded in 1867 by La Cour, and was known as the Lyngby Agricultural School. He expressly stated, "The Danish Agricultural School is an offspring of the Danish People's High School and must, like the latter, be based on the faith and the life of the people."

Like the People's High School, these schools also dispensed with entrance conditions (except that the students must be at least 18 years old) and also final examinations. They differ from similar schools in other countries, in that the curriculum comprises no practical work. It is assumed that the pupils are fully acquainted with this when they enter the school. At a number of these schools, however, students are given an opportunity of working on farms outside the ordinary curriculum.

The training, which is mostly given in the winter, during five to six months' residence in the hostels, consists of theoretical instruction in anatomy, chemistry, physics and psychology. Upon these follow their allied subjects—cattle breeding, care of the land, vegetable growing, book-keeping and farming science. In addition, the students are taught to avail themselves of scientific literature and periodicals.

This first course is followed by a longer course, of nine months, intended for agricultural supervisers, fodder-masters and similar occupations.

Many schools also hold summer courses in domestic economy for girls.

The fact that these schools were already in existence when, in 1880, Danish agriculture underwent a complete revolution, from extensive to intensive qualitative cultivation, was largely responsible for the smoothness with which the change was effected.

Subsidiary Agricultural Instruction

Associated with this indirect type of schooling are other subsidiary forms.

In many Danish communes, elementary school teachers hold evening classes in which they give instruction in the application of theoretical knowledge to practical problems, and particularly to problems of agriculture. These courses are not arranged in the form of a systematic compulsory continuation school. When the idea of compulsory continuation schools was first mooted in Denmark, many years ago, it proved unsuccessful. The basic idea of voluntary schools for those over 14, and of voluntary schools in general, was so well established that no room was left in which compulsory schools could expand.

In some cases, these free forms of instruction may have to include regular courses lasting several months. In such co-called " Post-schools " about 1,700 students receive instruction every year, in history, Danish, arithmetic, housekeeping and drawing.

About ten years ago, a subsidy from the Rockefeller Foundation enabled the idea of the American " *Young Farmer Clubs* " to be grafted upon this educational structure. Youths and girls between the ages of 16 and 25, from a single district, form themselves into a club. Each member is responsible for the care of one animal, and on the basis of such practical experience discussions are held at the meetings. To-day these clubs have a membership of from 8,000 to 9,000.

For older farmers, a large number of courses are held, lasting from one to two weeks. At these they receive instruction in new methods.

In addition, lecturing has been developed upon a wide scale. It is estimated that 2,000–3,000 lectures are given every year, and they are attended by large numbers of students. The lectures are followed by a debate.

The Stimulation of Scientific Research

While agricultural instruction in Denmark is based upon practical experience, scientific research is no less encouraged. The *Copenhagen Agricultural School*, founded in 1856, gives scientific training in agriculture and cattle-breeding. The training lasts two and a half years, and is followed by numerous continuation courses. Forty-three professors and lecturers give instruction to some 700 students, of whom about 150 are practical farmers. Altogether 1,845 practical farmers from this school have passed the higher scientific examination.

Graduates from this institution form a body of experts, and these are largely employed by the co-operative societies and the network of agricultural " consuls " (consultants). Denmark maintains about three hundred of these full-time *agricultural consultants*. Twenty-two of them are permanent State officials, and four represent the State in foreign countries, accumulating new methods and opening new markets. The work of the agricultural consultants is to establish relations in their area with the practical farmers, and to advise the latter in all appropriate matters. They are also the principal lecturers. Theory and practice are thus admirably associated. Forty professors and lecturers, 300 consultants and several hundred teachers from the various types of educational institution are working in the interests of about 200,000 farms ; and 3,000 lectures per annum and 60 agricultural periodicals serve to disseminate experience and scientific information. Some 6,000–8,000 youths and girls attend the five to six months' courses at the high schools ; about 2,500 are also trained for the same time in the agricultural schools ; and there are 8,000–9,000 members of the Young Farmers' clubs.

It is doubtful whether there is in Europe any sphere so thoroughly permeated by such varied forms of education.

Statistics of the Danish Co-operative System

The statistics of the Danish *Co-operative system*[1] show that in Denmark the various co-operative societies number 1,669,862 members. With a population of 3,247,000, this is a very high figure. There is scarcely another country where more than half the population belongs to co-operative societies. The number is better understood when we realise that the Social Insurance system, and particularly the Sick Benefit Insurance, has been built largely on co-operative lines ; that this self-help movement is assisted by the State, and that, further, among the agricultural co-operative societies, with a membership of 431,141, it is not infrequent for the same person to be a member of several societies.

According to an expert estimate, the agricultural co-operative associations number about 200,000 individual members. This, with the 204,000 individual agricultural undertakings, represents an exceptionally high figure. The dairy co-operative societies alone number 190,000 members, and the co-operative slaughter-houses 179,873 members. This means that 90 per cent. of the total production of the dairy industry is handled by the co-operative societies, and 84 per cent. of the total production of meat by the co-operative slaughter-houses. The co-operative fodder-purchasing society handles 67·4 per cent. of the total fodder imports.[1] In other words, by far the greater part of agricultural production is in the hands of co-operative societies, and is, therefore, under the administration of the farmers themselves.

---

[1] *Op. cit.*, Supplement, page vii.

The triumphal progress of the co-operative system in Denmark since 1880 is not only an economic fact, it is a social and human phenomenon of the first order. The way was prepared by the high schools; when the idea was imported from England, it found a society already well prepared to receive it. The basic idea of the high school found its complement in the principles of the co-operative society.

The Spirit of the Movement

It has been rightly pointed out that, in the co-operative system, the economic aspect is not the deciding factor. There is another and far more important factor: "Behind the turnover and membership figures lies an almost indefinable but nevertheless highly important factor, which can best be described as the attitude of the movement, or, more briefly and appositely, as its spirit."[2] It may seem surprising to find these words in the official report of the Danish Agricultural Board. We are not accustomed to abstract or mystical expressions in an economic report. But in Denmark it is different. The Danes are sceptical and unemotional, sober and realistic; verbiage and high-sounding phrases only offend them. But for them expressions like *soul*, *spirit*, *human*, *Denmark* and *Danish nationality* are no longer mere rhetorical expressions. And the credit is due to Grundtvig, who has made them realities—as real as rain, or earth, or sun. To understand the Danish co-operative system, we must realise this. It is not there for economic profit, but as the fulfilment of an idea dormant in the subconscious mind. Co-operative societies for production flourish, because their "idea" is in agreement with common conceptions and human impulses.

They are, in fact, large supervisory and *educational groups*, to which the individual voluntarily submits. Woe to the farmer who delivers bad milk or inferior meat!—he is automatically eliminated from the ranks of the members. There is only one parallel—the conception of fair play evolved in English games. To be suspended from membership of a Danish co-operative society is as bad as to be disqualified from an English football club for unfair play.

The system of *decentralisation*, moreover, gives to each small group an independent administration. Thousands thus secure the opportunity of becoming honorary leaders or managers of co-operative societies ; and the too-permanent official, so often a source of friction, is dispensed with.

---

[1] *Op. cit.*, page 47.

[2] *Op. cit.*, page 40.

The people's high schools have never carried on propaganda for the co-operative associations, but, as stated above, they have prepared the minds of the people for public co-operation. Thus, the idea of competition, with its attendant secret bargaining, has gone : there is common effort to achieve progress. " In this way, interest has been created in the work outside the immediate circle of home ; and as a result, abilities and impulses are often aroused to share or to conduct larger undertakings.[1] It is the less surprising to learn that, in contrast to the agricultural populations of many other countries, the farmers of Denmark, both in their political and international outlook, incline towards progressive and liberal ideas. If, as has been said, the co-operative movement rose " like magic " out of the atmosphere of the high school, it would seem that the same " magic " has now spread even farther, and is making itself felt in the general political life. The success of the co-operative system, in fact, now constitutes the best proof that Grundtvig's ideas on education were right.

These ideas have served above all to keep alive that which is otherwise so often killed by school education—the instinct. In the report of the first chairman of the first co-operative dairy, established in 1882, we read that " without being quite clear in their minds, the people had ' drifted into ' the realisation of the co-operative idea." Such " drifting " can be disastrous where the instinct is confused. We know, for example, how the world " drifted into " the war of 1914. But the Danish farmers have drifted into ways of peace. They have removed war and fighting from the scope of their lives : they put their trust in the power of more peaceful instincts. Such a will-to-peace can only grow out of the conviction of one small circle, and spread therefrom. Denmark is the first country in Europe to reduce its army and navy to the strength of a police force.

E. THE DANISH " FREE SCHOOLS "

The effects of the high schools are apparent beyond the workings of the co-operative system.

Every summer the teachers from the 307 so-called *Free schools* assemble for fourteen days at one of the high schools. These free schools contain 13,000 children, between 7 and 14, in all parts of Denmark, and give an elementary school education. They are private undertakings, financed by contributions from the parents. It is only in the last few years that they have received a subsidy of 50 Kronen per annum, per child, from the State.

Although few in number, they have succeeded in establishing themselves as a result of many years' persistence ; and to-day it may be said that their spirit has often influenced the other schools of Denmark. They originated in about 1850, as a result of an idea of Grundtvig's concerning the nature of schools. School education, he maintained, should be left entirely to private initiative ; since the best schools must be the homes of capable and active citizens.

---

[1] *Op. cit.*, page 41.

It should be remarked that the public elementary schools in Denmark, established as far back as 1814, did not enjoy a high repute. They were unpopular, and regarded as a waste of money. The children in them were bored and depressed, and the teachers were treated as a kind of public enemy. The reason was that there was no genuine life in them. Grundtvig called them the "Schools of Death."

Grundtvig's Conception of these Schools

To such a state of affairs he opposed the picture of his new conceptions. The school, in the words of Kristen Kold, was there to make children forget sorrow, the sorrow resulting from boredom and mechanical over-exertion. It was to be a source of joy, a happy place, re-echoing with song. Grundtvig held that the actual subjects of teaching should be only reading, writing and arithmetic. For the rest, the teacher was to be an inexhaustible well of stories, from history and mythology. Singing and poetry were to occupy the leading place. The children were to have the care of animals and plants and as many things as possible from daily life as the premises could contain. He opposed, not only mechanical learning-by-heart, but all religious instruction in the schools, even the Catechism by heart. A deeply religious man, he knew the mischief which might come of such tedious, compulsory learning. There were to be no examinations held in connection with the school. Life and learning were to be interwoven, and life was to come before learning.

There was to be no State direction. The decision as to what their children learned was to rest solely with the parents. To the parents he gave the advice that schools were to cultivate not only the intellect but the imagination and emotions. The inner participation of the child he held to be a condition precedent to all instruction : "Nothing is difficult for the willing mind."

Grundtvig laid down these general guiding lines. But he was not a pedagogue. He was fortunate in finding, in his pupil and collaborator, Kristen Kold, one who was able to convert his ideas into practice.

Truth and reality, said Kold, must be the mainstays of the school : the teacher himself must have unshakable faith in everything which he teaches. Every form of education needs this moral element. Kold, as already said, gave an example in his own life ; and his return from Asia to Denmark, in 1848, was characteristic of his simple, unassuming nature. He landed at Trieste, purchased a small four-wheeled hand-cart, loaded his baggage on it, and spent two months wandering through Austria and Germany to Denmark. "The express mailcoach," he said, "would have been cheaper, but how else could I have learnt to know Austria and Germany and all the people on the road ?"[1]

---

[1] The Life and Sayings of Kristen Kold are to be found in the work by Frederik Nygaard, in two volumes (Odense, Milo, 1895).

The Growth of the Free Schools

Just as unassuming was the inception of the first Free School. The families in the little village of Rysslinge were enthusiastic for Grundtvig's ideas. They established the first free school and appointed Kold as teacher; that is to say, he was allowed to take his meals in succession at the homes of the different families, in exchange for which he had to teach their children.

The number and importance of the Free Schools grew from year to year, as a result of the reports of their human results. Many outstanding personalities in Denmark came from them. It was said of a teacher in one school: "He treated human beings like neglected plants needing water and life. It was as though all shadows had been blown away. Their best qualities emerged: eyes brightened, cheeks grew red." In a report on the Danish Educational System,[1] it is stated that many "modern" ideas on education, when brought to Denmark, sounded old and familiar.

It does in fact appear as though Denmark were developing education into a living art. We shall give another example:

During each winter, some 20,000 adults attend instructional courses. The elementary school teachers in the villages and provincial towns have volunteered to give these. The adults sit in the evening in the school classrooms; they squeeze into the children's desks, and hear the teachers talk on subjects interesting to them. This institution was already provided for in the School Act of 1814. (It was also one of the educational plans which Condorcet submitted to the French National Assembly in 1792.) But the idea found no favour, and the institution speedily disappeared. In 1893 it was restarted, and has now become a striking reality. What was responsible for this change? In the interval the people's high schools had prepared the ground. It was these schools which by their method kept alive the instinct for learning, so that in the adult it should survive beyond the school years.

F. TECHNICAL EDUCATION AND OCCUPATIONAL TRAINING

The principle of the free initiative has also been applied in Denmark to technical education and *occupational training*. Here again the State or the Communal administration limits its assistance to subsidies, advice and supervision. The schools as such are private schools.

When the old-time Crafts Corporations were dissolved by law in 1857, their place was not left empty, as it was, for example, in France. New Crafts associations were immediately formed for occupational training, so as to continue at least the training of apprentices.

The initiative of these Craft and Industrial associations led, in 1860, to the establishment of eighteen technical schools, run entirely by the associations themselves. In 1924 they numbered 254. Even to-day, the majority of these schools are still equipped by the Craft or Industrial associations, and are mainly financed by them. Many of the Master craftsmen act in the evening as teachers.

---

[1] Boye-Borup-Rutzebeck, *Education in Denmark* (Oxford University Press).

Wherever the need arises for such a school, the State is ready with advice. The first subsidy, however, is not granted until the third year. The institution has to show during its first two years that it can stand on its own feet, and that it answers the requirements.

Type of Instruction in Technical Schools

The instruction given in such a school as a rule supplements by theory the practical craft training. On principle it is given in the workshops themselves. But in Copenhagen a number of the urban trades, such as tailors, printers and watchmakers, have established their own schools, in which the practical side of the trade is either supplemented or taught in full.

The instruction is mostly given in the evening. Besides arithmetic and Danish, it comprises the usual auxiliary subjects, such as drawing, designing, costing, book-keeping and the theory of management.

The Building trade has instituted full-day courses, lasting for several months during the winter. These occupy the time during which, in cold northern climates, no work can be done out of doors. A number of People's High Schools have, also, come to an arrangement with the technical schools, or have joined forces with them. This enables students to attend the technical school, or a technical department, while they are undergoing instruction in the high school.

In the towns the instruction is mostly given by professional teachers. In the country it is entrusted as a rule to the master craftsmen themselves, who are trained for this teaching by courses lasting six weeks.

It is reported that, although the apprentices trained in the provinces are not up to the standard of the town apprentices in ordinary school subjects, they excel the latter in handicrafts; since the master craftsmen often devote personal attention to their training.

The number of students in technical schools was: in 1900, 18,139; in 1915, 18,158, and in 1924, 24,700.

It may be said that, in this system, Denmark has retained the best features of the Co-operative educational tradition. It has avoided the break between the old tradition of the craftsmen and the skilled workers required by modern practice.

The Technological Institute in Copenhagen

A specific system of teaching alone could not have secured this. Some knowledge of the *Technological Institute* in Copenhagen is necessary, in order to understand all the causes of the development.

This institute is unique of its kind. It also has been developed as a private undertaking, on the principle of group-initiative. It was started on a small scale in 1906; and it now possesses new and extremely large buildings in the centre of Copenhagen. The school is intended solely for adults. Not apprentices alone, but journeymen and master craftsmen themselves, are given instruction in every technical subject. As in the case of the high school, the minimum age for admission is 18 years ; but there is no maximum age limit.

The Aim of the Institute

The aim of the Technological Institute is to place at the disposal of every worker, craftsman, foreman, or small industrialist, all those technical achievements—such as machines, means of instruction, knowledge, laboratories, research departments, books and periodicals —which only a large institution can afford.

Its guiding principle is, once again, to develop the spirit of the people. This of necessity entails the fostering of small businesses ; because in them a strong personality can always make its mark anew. What is being done in agriculture, to strengthen the smallholding and the family unit economically against the big landowner, is being attempted here in an entirely new sphere, that of handicrafts and small-scale industries.

> " The same slogan which was adopted in the progressive development of agriculture, that of the free man behind his own plough, was to be translated here into terms of urban production—the free man in front of his own lathe." . . . " Access to cheap power, following upon increasing electrification in the towns and subsequently throughout the entire country, furnished the technical impulse towards transferring the distribution-movement, that is to say the division of agriculture into small units, to the industrial field. It gave the stimulus to far-reaching plans for the ' democratisation ' of industry : a principle particularly sympathetic with the nature of our people, and with our economic situation."

At the end of the nineteenth century, we must recall that means were being sought for finding a basis of existence for a growing surplus population. The first to be considered was the Art industry ; but the attempt proved abortive—technical development had already transferred its centre of gravity to the sphere of machine production.

For Denmark, industrial development on a large scale was out of the question. The only means which remained, in keeping with the national bias towards æstheticism and individualism, was to aim at one goal, namely—" to develop handicrafts and small-scale industries with the air of a combination of technique and personal abilities." It was recognised that the most important step was to develop personal ability, as the essence of every undertaking, from the largest to the smallest.

> " Industrialists and technicians speedily recognised that, having regard to the development of our industry in the past, there could be only one solution for us ; since we lacked all the so-called natural conditions needed for an industry. This disadvantage had to be offset by developing the only natural factor which we possessed—the human factor. All available forces had to be brought into play, in order to provide the training, the teachers and the schooling. It was worth the effort. Although

> it may sound improbable, it is none the less true that, notwithstanding its well-known agrarian bias, our people was proved to possess innate technical and mechanical abilities, such as speedily made themselves felt in an irresistible industrial development."

With these words, Pòul Drachmann, who possesses an intimate knowledge of this development, describes the situation in the Jubilee publication of the Technological Institute, 1931.[1]

Results obtained by the Institute

The student of comparative education will observe with pleasure that well-tried educational principles, in one department of learning, can be transferred easily, and almost automatically, to an entirely different plane; and this principally because they have proved themselves appropriate and convincing in the first instance.

Even so here: in every aspect of this new sphere of technique and handicrafts the same basic ideas can be detected—and often expressed in the same words, which had been developed fifty years before in the sphere of agrarian life, and by the People's High Schools.

Further, the results achieved during the first thirty years of the Technological Institute's existence show that these basic principles have proved equally successful in the technical sphere. During this short space of time, the Technological Institute has developed into a centre of power, for the entire technical life of Denmark, such as can only be likened to the functioning of the heart in the human body.

The way in which the numbers of its students have grown is also remarkable. It began in 1906 with 242 students. Its increase proceeds:

1911–12	1,000
1915–16	2,000
1918–19	3,000
1922–23	4,000
1924–26	5,000
1925–26	6,000
1933–34	6,700

Unfortunately, no details are available regarding the ages of these students. But, judging from the groups in workshops, laboratories and lecture halls, the average age may be estimated at more than 25. Many students must have been much older, since only journeymen and master-craftsmen are admitted. This places the Institute as far above the level of an ordinary technical school as a scientific Academy stands above a higher-grade school. It is the masters of their trade who meet together in it, to share anew in the progress of knowledge and technical development.

Syllabus of the Institute

The instructional method consists of fixed courses, as in the high schools or the agricultural schools. They last from two to ten weeks.

---

[1] *Technologisk Institut*, 1906–1931. *Fagskolen for Handvaerkere og Mindre Industridrivende* (*Koebenhavn*, 1931).

Masters, journeymen and small industrialists come from all parts of the country to attend them. The students residing in Copenhagen prefer the evening courses; while those from outside the town mostly choose the day classes. Many of the courses are actually held in the provinces.

What is taught? Theoretically, and practically, everything which it is possible to teach in the sphere of handicrafts and industry; but primarily the problems of the new situation resulting from the increasing penetration of the machine and the small motor, even into handicrafts. Mechanics, locksmiths, joiners, carpenters, in fact all conceivable trades, and particularly those which have to do with motors and electricity, have their special courses. These courses are designed to readjust their ideas, from the old simpler tradition of the handicrafts to the needs of modern times. Instead of abandoning good hand-workers and leaving them to be submerged, an attempt is made to help them to raise their standards. Even farmers, and of all ages, are taught in special courses the uses of machinery and motors, their care and their repair.

In connection with the Agricultural institution, the extensive training of smallholders has been supplemented by a far-reaching system of State loans. During the last thirty years, more than 80,000 smallholders have been so assisted.

These loans have their counterpart in connection with the Technical training: in the credit system which has been developed to provide craftsmen and small industrialists with all kinds of new machines and motors.

As we have cited in the case of Agriculture, everything is being done in the sphere of Technics to make craftsmen and technicians acquainted with the most up-to-date literature, and to enable them constantly to read scientific books and periodicals connected with their trade. The large library of the Technological Institute is open to all; and 270 national and foreign periodicals are at the disposal of all students. Technical handbooks are also published under the slogan: "To each worker his textbook."

The Use of Advisers

The parallel between the two spheres does not end here. For technical matters, the Technological Institute has also adopted the excellent system of advisers. Every craftsman, technician, or small industrialist can obtain the advice of a professor, teacher, or adviser attached to the Institute, on all problems affecting his work, on the installation of new machinery, or on technical questions of production. The adviser visits him at home, examines his position and gives him advice in exchange for a modest fee. This fee is the same throughout the country. Forty-five engineers, constructors and foremen are employed in this fashion by the Institute.

The *Experimental Laboratory* at the Institute is also open to every craftsman and technician for every kind of experiment.

Associations of Ex-students

Finally, there is a further parallel : former students of all ages are formed into friendly associations, which meet regularly during the evenings in the club premises of the Institute or in the provinces, organise festivals, and arrange lectures which are frequently followed by a dance.

The new building of the Institute possesses, in its club rooms and dining-room, excellent means for satisfying this human aspect of communal life.

G. THE DANISH FOUNDATIONS

The Institute, like every undertaking of its kind, owes its existence to a single man. In this case, the founder and director is Gunnar Gregersen. He was assisted by a group of the most outstanding large industrialists, economists, business men, craftsmen, artists and professors ; all of whom, from the outset, entered enthusiastically into the spirit of the new idea, and co-operated zealously on committees and advisory boards. Many of them established Foundations which provided the greater part of the funds for building up the undertaking. In doing so they erected an imperishable memorial for themselves. The spirit of inner unity provided an inexhaustible source of power, in the rural areas of Denmark—as much as in Copenhagen. Above all, they had placed the idea of the general weal before all thought of competition.

No consideration of the Danish educational system can exclude the great Danish *Foundations*. These have been established during the last three generations by a number of rich citizens in Denmark, for the assistance of capable young men and women in the period following their actual school and university training. No other country in Europe has anything to compare with them. They are not the creation of one or two great benefactors. They are beginning to spread, slowly but so widely that one is justified in speaking of the dawn of a new tradition.

An Attempt to assist Talented Students

And the tradition is once again following the lines which we have noted in other spheres of the Danish cultural system. It extends from scientific research proper to the assistance of gifted students of all types, but especially those distinguished in art, handicraft, industry and technics. For instance, special efforts are now being made to discover and assist young inventors and pioneers in the technical sphere. Anyone, no matter what his position or age, if he is known to have discovered or to be pursuing some original idea, to be studying some special subject, or perfecting an invention, is afforded by this new tradition the possibilities usually only available for scientific research workers. He is given the means and the time for quiet study and research, for educational travel at home and abroad, for books and what else he may need.

Finances of the Foundations

The amount available to-day in the form of special private Foundations, for all these scientific, artistic, technical and inventive activities, may be estimated at about 100 million Kroner. The sum available annually amounts to about 5 million Kroner (about £225,000). In other words, this represents, for a population of 3·6 millions, about 1,400 Kroner for every thousand inhabitants. If we apply the same figures to English conditions, London would be receiving annually about £500,000, and Great Britain about £3,000,000 from funds provided by private Foundations, for the assistance of highly gifted men and women in science, art, technical work and handicrafts, and for young inventors. This is in addition to the school and university scholarship system, and is only for post-graduate work or for men and women in actual life-work.

The Carlsberg Fund

At the head of this new tradition stands the munificent Foundation provided by the brewer, Karl Jacobsen. On September 25th, 1876, he handed over the whole of his fortune, including his brewery, to the " Carlsberg Fund." The object of this Fund is primarily to promote scientific research in Denmark.

Somewhat later, his son founded the *New Carlsberg Fund* in the same way, for the promotion of Art in Denmark.

The old Carlsberg Fund represents to-day about 50 million Kroner, consisting chiefly of one of the soundest business enterprises in Denmark—the Carlsberg Brewery. In 1934–5 the income of the fund amounted to 2,410,480 Kroner.

This income is used to maintain the world-famous chemical, biological and physiological institutes belonging to this Fund; in which such outstanding research workers as Albert Fischer are working in the front rank of research. The research work of Niels Bohrs and his collaborators was allotted, in one year, 186,000 Kroner, in the form of single donations and current contributions. Other older and younger Danish research workers were generously assisted in 352 cases, with an amount of more than 1,200,000 Kroner, some of them being provided with a permanent salary.

No single sphere of science and research is unrepresented in its record. It is due to the work of the Carlsberg Foundation that Denmark, with only 3·2 million inhabitants, excels in scientific research many countries with ten times its population; that it stands in the front rank in this sphere.

The New Carlsberg Fund had an income in the same year of 856,278 Kroner: 333,253 Kroner were used, in 116 cases, to purchase works of art, particularly of young Danish artists, the balance being expended on historical works of art, and on Museums.

This Foundation is largely responsible for the fact that art still flourishes in Denmark, and that artists continue to develop; while, in so many countries, both art and artists have been going through untold depression and suffering. If we translated these sums to Britain and into sterling, it would mean that Great Britain would be expending annually, from the funds of private foundations, about £200,000 in purchasing the works of living artists.

There are also a large number of smaller foundations, for building museums, for collections, for schools and educational institutions. During the last thirty years, the Technological Institute in Copenhagen alone has received the major part of its funds for the purchase of its equipment and for erecting its buildings from such Foundations.

The Andersen Foundation

The latest wave, in the flood of Danish Foundations, was started by a self-made man, *Lauritz Andersen*, who died five years ago. He started life as an apprentice-smith in Copenhagen ; and when he died, as General Agent of the International Tobacco Trust in China, he left some 6 million Kroner to the Andersen Foundation which he had established. It is the object of this Foundation to do for the practical professions what the Carlsberg Foundations are doing for science and art, that is to say, to assist young, capable people.

In 1935, it was able to distribute 245,450 Kroner, about 170,000 of which was allotted to capable young people, and the balance devoted to social purposes.

The annual reports of the Foundation reveal a variegated picture of the inventive and enterprising spirit of the modern generation. New tools, new motors, artificial resin, heating apparatus, iron shutters, die-stamping, preservation of green fodder, lace-making processes, electrical high-speed typewriters, artificial lighting for forcing sheds, fish-drying methods, fertilisation of moorlands—these and many other inventions and processes are found here side by side. In addition, many young business people, merchants, craftsmen, technicians, are given an opportunity of travel at home and abroad, or are provided with capital (which they repay) for their installations.

The Otto Moensteds Foundation

The same practical lines are followed by the new *Otto Moensteds Foundation*. The greatest margarine manufacturer in Denmark bequeathed his factories and his fortune, to an estimated value of 20 million Kroner, towards assisting young talented merchants and technical students and graduates, and towards training teachers for Commercial and Technical schools ; in fact, towards promoting anything likely to assist Danish trade and commerce, or to redound to the honour of Denmark.

The manufacturer, *Thomas B. Thrige*, who is still alive, converted his Engine and Waggon Works into a Foundation on analogous lines, and intended for similar purposes. The assets of this Fund are estimated at about 8 million Kroner.

The Tuborg Fund

A new method was adopted by the Tuborg Brewery by its prominent director, B. Dessau. On the occasion of an increase in its capital, in addition to a total share capital of 18 million Kroner, it created a further million shares which were handed over to a "*Tuborg Fund*," the assets of which are under a separate administration. The proceeds from this Fund, which amounted in 1934 to 151,649 Kroner, are devoted to social and educative purposes, and above all to assisting Danish commercial life. Scientific objects are, however, not excluded. During a period of four years, 384,000 Kroner were allotted for assisting men of science, art and commerce; 75,800 were used for social purposes and charity. Further, as one result of this new form of foundation, young and energetic people became, as it were, joint owners as to 5½ per cent. of the whole undertaking.

H. CONCLUSION

On a broad estimate of the general Danish educational system, we are, we suggest, entitled to say that there is no country in Europe where, by means of direct or indirect assistance and by the creation of such divergent training possibilities, so many opportunities are given to people of all ages to display their special proficiency, and to develop that proficiency further. The importance of school examinations recedes into the background when compared with such methods of general encouragement.

If we glance at the map of Europe to-day, and look at the northern and southern extremities of its western division, we see in the north, Denmark—a small country without valuable resources in its soil and under a harsh northern climate; but happy and harmonious. In the south we see Spain: rich in the resources of its soil, as in its southern climate; but living in disruption and despair.

If Grundtvig were to point the moral, he might say that Spain had neglected to seek the "living word" in time; and that more important than the southern sun and the rich soil is the serious attempt to awaken a living harmony in the spirit of the people through education, in the widest sense.

Bibliography

The following English works may be cited, dealing with Educational matters in Denmark:

(1) Boje-Borup-Rützebeck, *Education in Denmark.*
(2) Begtrup-Lund-Mannicke, *The Folk High School of Denmark.*
(1) and (2) published by the Oxford University Press.
(3) "Denmark," in *Encyclopædia Britannica.*
(4) Detailed reports of the Ollerup High School of Niels Bukh will be found in the Report of the Board of Education: Gerald W. Hedley and Gerald W. Murray, *Physical Education in Denmark and Sweden* (July 1935).

Danish literature is extraordinarily rich, and the author will be pleased to furnish any further personal information.

CHAPTER EIGHT

PRACTICAL PROBLEMS OF THE RAISING OF THE SCHOOL-LEAVING AGE IN EUROPE

A. DANGERS THREATENING THE STRUCTURE OF EDUCATION IN EUROPE

UNTIL some eight years ago, the trend of education in various countries of Europe indicated a progressive approximation, in conditions and in methods. There was a tendency in every country to increase school attendance both intensively and extensively ; and a cursory comparison of the curricula and annual reports of the several countries (and especially of those published in the excellent annuals of the Bureau International d'Education in Geneva) might have suggested that the " century of the child " was rendering everywhere school a paradise and youth happy.

During the last eight years, however, a break has appeared in this structural development. The central part of the Continent is still moving in the same direction. But on the periphery there are signs of something resembling collapse ; and, beyond it, education is undergoing crises of extraordinary severity.

In consequence of its tragic conditions, Spain is now being drawn even farther into this outer circle ; although a crisis in education existed even prior to recent happenings.[1] The school in Spain must now suffer proportionately ; and many excellent schemes and undertakings will be delayed for decades.

Italy, under the leadership of Mussolini, has enthusiastically tackled the problem of its schools. It has endeavoured, with the means at its disposal and at great sacrifice, to repair former omissions, both in combating illiteracy and in creating schools, more especially in southern Italy.

The Situation in the Eastern European States

It is in the eastern European States that we begin to observe the extent of the dangers threatening the structure and development of education. Not that there is any shortage of teaching staff, or of plans and good intentions. All these three factors are frequently of high quality, and some of the countries made heroic efforts in the post-war years, especially in connection with higher education. The danger of a slow retrogression, to almost medieval conditions, comes from a different quarter. The economic crisis, like a slowly rising flood, is gradually undermining the very foundations of education ; and, with them, all prospects in life for those who have worked their way up by means of the schools and higher education.

---

[1] It had been the writer's intention in the summer of 1936 to study the special problems of education in Spain, for the purpose of the YEAR BOOK OF EDUCATION. The man most conversant with Spanish educational conditions, however, the founder and head of the best selective institutions, Professor Castelejo, as far back as July drew his attention to the growing difficulties of carrying out far-reaching educational schemes. He stressed the fact that the incipient political struggle would drive the best of young Spaniards into opposing camps ; and that, for all educational institutions, the background of quiet and steady study no longer appeared to exist.

Tens of thousands of graduates of the universities and training colleges and higher schools in the countries of eastern Europe are unemployed. They have no prospect of obtaining work in the future. They are sinking into the lethargy of hopelessness, and increasing dangerously the Continental political tension.

But the menace goes still farther. In a number of countries the foundations of State finance on which the educational systems are based are threatening to subside. The buildings can no longer be maintained in good repair : they are too small for the growing population, and the classes become more and more overcrowded. The salaries also grow more and more inadequate. The heroism of the teachers who, under these conditions, strive to maintain the ideals of education and to keep alive in the children a belief in a better future, is worthy of the highest praise.

Too little is known of this in other, western countries ; in which, by means of a Government Order or a decision of Parliament, large sums can be made available for the extension of education, for better school buildings or for adequate incomes for teachers. At the same time, a sympathy felt or expressed for this gallant work done by their colleagues in other countries would make an important contribution towards European solidarity among those concerned with education.

The knowledge that there are such conditions should dispel the illusion that Europe is a harmonious and homogeneous whole. On the school benches, in the teaching world, and among the growing generations, there are also the "haves" and the "have-nots." And in this sphere, the contrast is particularly painful and dangerous.

The Unconcern of Western Europe

Over Eastern Europe approaches a dark shadow of untold poverty. Under it, millions are slowly drifting back into the dark ages. Economically, the most primitive conditions are returning : educationally, a new wave of illiteracy is replacing the dream of western civilisation. The cycle of western progress and of western civilisation is contracting. Were the human heart what it might be, this would mean that the West would set itself passionately to the task of fighting for the high ideals of liberty, humanity and brotherhood, while there is yet time.

This is not happening. For most of our intellectual circles their range of vision is bounded by the flags of their own country : their hearts cease to beat at the point where another flag waves. The feeling of a common humanity, even if only within Europe, is less active to-day than at the beginning of the last century, to say nothing of the early Middle Ages.

Each of us now acts and thinks in his own small circle, and we do so with a quiet conscience. Would this conscience be shocked to note that the two alternatives, that of free educational development and that of a decaying school system, are already facing one another in a menacing proximity ? Our eyes are not yet open to the seriousness of the position. We still refuse subconsciously to admit that the oncoming wave of a new " illiteracy and decay " has already advanced so far westward that it is only at a short distance by aeroplane from Berlin—at the Polish-German frontier.

The Conditions in Poland

The necessary retrenchment in State expenditure during the last five years, and the collapse of municipal finance, have led to the result that, in Poland, the schools can no longer keep pace with a rising birth-rate. The State and the Municipalities, unable any longer to meet the cost, have appealed for help to a private organisation, the " Friends of the Elementary Schools." But even this organisation is inadequate to meet the demand. The existing school classes are often so over-crowded that there can be no question of effective education. And yet, outside the schoolrooms, illiteracy is growing apace.

We reproduce below a report from Warsaw, taken from the *Frankfurter Zeitung*, October 21st, 1936.

> " When the new Polish State was founded, the provisional government immediately proclaimed free compulsory education. A serious attempt was to be made to banish the *illiteracy* in the former Russian and Austrian partition territories. The discovery, after nearly two decades, that illiteracy in Poland is not decreasing, but *increasing*, is therefore all the more alarming.
>
> " Illiteracy in Poland has always been regarded as the oppressive inheritance of a painful past. In actual fact, after the freeing of Poland, the school attendance did increase to a marked degree, and in 1928–29, according to official statistics, it comprised 96·5 per cent. of all children of school age. Since then, however, the situation has undergone a change for the worse. The proportion of school pupils to the total number of children has fallen alarmingly, since the natural increase in the population has not been accompanied by any proportionate increase in the facilities for education. In 1931, 280,000 children were receiving no education ; in 1934, it was 460,000 ; and to-day a whole million seem doomed to remain illiterate.
>
> " It might be thought that to meet the emergency the State expenditure would have been increased. The opposite is the case. The expenditure upon education has been reduced, in common with the whole State budget. The cost of school buildings was transferred in 1933 to a private association. In three years this had opened 2,685 classes ; but to check retrogression alone, at least 3,000 new classes would be needed every year. It might again have been thought that a keen demand would have arisen for teachers. This also is far from being the case. In curious contradiction to the vast numbers of the illiterate, Polish *teachers are unable to find employment*. Out of a total of 18,000 young people waiting for posts, not more than 2,000 were appointed in the current school year, i.e. those who had finished their

> training in 1929 and 1930. The turn of the remaining 16,000 has not yet come. They must resign themselves to years of inactivity, while a million Polish children stand idly waiting for them."

From earlier reports issued by the Polish Ministry of the Interior, it was already known that an appallingly large proportion of the rural population, during the greater part of the year, i.e. as soon as the exceedingly meagre proceeds of the saleable portion of the harvest are exhausted, is entirely cut off from the system of economic interchange characterised by payment in money. These millions live for the greater part of the year on the basis of a medieval system of barter. They have grown accustomed in Poland to speak of a surplus population of several millions, in view of the rapidly growing numbers of the population.

Assuming the data given in the above report to be correct, there is now a further million of surplus, that of the children for whom no schools are available. Surplus population in the educational sense spells illiteracy. Confronted with a situation where attendance itself is reduced to zero, discussions as to the value of seven, eight or nine years at school are silenced.

B. THE RAISING OF THE LEAVING AGE IN SWITZERLAND

Meanwhile, in close proximity to Poland the raising of the school-leaving age is being pushed forward, both as matter of debate and of experiment. Belgium and France have decided to raise the age. In France it forms a part of the programme of reform of the Blum Government ; and will provide in addition work for 2,000 unemployed teachers.

The Results of Investigations in Switzerland

The mere passing of the law does not, of course, solve the problem. Raising the school-leaving age is far more complicated in practice than is admitted during the period of agitation for it. In Switzerland, the home of such educationists as Rousseau, Pestalozzi and Fellenberg, the problem has assumed a deeper significance. During the past five years a Committee of sixty-four members has been studying it. The results are now available, in a book entitled *Ein Jahr mehr Kindheit*.[1] But there are also forty-four treatises emanating either from the Committee itself or prepared at its suggestion. No other country has examined the question so exhaustively.

Switzerland is well equipped for such an investigation. It is in no way homogeneous in the school sense : it represents, as it were, a continent in itself, containing all important continental variations in the composition of its population and in the regulation of its school period. In the twenty-five cantons, independent educational units, every variety of the school-leaving age is encountered. Compulsory attendance at school commences between the ages of 5½ and 7, and ends between the ages of 13 and 15½. In a number of rural districts, children after a certain age are released in the summer to work on the Alpine pastures, and attend school only in winter. Side by side with these are purely urban districts. Finally, the Swiss population contains both Germanic and Romanic elements, maturing at different ages.

---

[1] *Ein Jahr mehr Kindheit, Ein Beitrag zum Kampf gegen die Arbeitslosigkeit* (*Another year of Childhood, A contribution towards combating Unemployment*). (Orell Fussli-Verlag, Zürich-Leipzig.)

The result of the investigation has been wholly in favour of the raising of the school-leaving age to 15. The proposal of raising it to 16 was only postponed on practical grounds. The decision is important, because the Committee consisted of independent experts. Its sixty-four members examined the question during four years; and included only five male and female teachers. Teachers are often regarded as prejudiced in favour of raising the school-leaving age for a number of professional reasons. But the Swiss committee shows that the demand for raising the age does not emanate from the teachers alone, since it included Government representatives, representatives of industry, employers and employees, vocational guidance institutions and institutions for youth welfare. Its recommendations, therefore, in favour of raising the leaving age to 15, may be regarded as objectively grounded and impartially arrived at.

The enquiry started with the question of the age at which juveniles should go to work. In response to popular demand it was enacted sixty years ago, on March 23rd, 1877, that juveniles under 14 may not be employed in factories. In agriculture, handicrafts and trade they may be employed earlier; but in the catering industry the minimum age is 16.

The System of Part-time Industrial Work in Switzerland

In most of the cantons, however, part-time industrial or commercial work is allowed, as an accessory to school attendance, for not more than three hours per day. Extensive use is made of this concession. An investigation carried out by Maria Borle showed that it is sometimes seriously abused.[1] She points out that for many elementary school children, from their eighth year onwards, the normal eight-hours' day, as the factory worker understands it, no longer exists. School work, study and physical labour occupy more and more time every year. The needed time for sleep and play is eliminated. She sees in this one of the chief causes why the younger generation are deserting the country for the towns. Regular working hours, free evenings and Sundays attract the child as soon as it leaves school. Out of 233 school children of peasant families interrogated, only thirty-five desired to become farmers.

For handicrafts, rural work and house work, as already stated, no minimum age has been fixed. One might expect, therefore, that, under the two headings in occupational statistics covering the ages 13–14 and 14–15, a large number of children would be found. Surprisingly enough, at the last Census held in 1930, out of 1,942,626 engaged in occupations only 4,713 were below the age of 15. The experts to-day estimate their number at about 5,000. Even in the Canton of Zürich, which in the town of Zürich possesses a large city with more than 600,000 inhabitants, only 680 children under 15 are engaged in occupations. As compared with two school years with attendances of 70,000 each, i.e. 140,000 children in all, this 5,000 is infinitesimal.

---

[1] "Enquête sur le travail des enfants dans l'Agriculture dans une région de la Côte (Vaud)." *Zeitschrift für Hygiene Jahrg.*, 1931, page 959.

If, therefore, the minimum age for the employment of juveniles were generally fixed at the completion of the fifteenth year, only these 5,000 children would be affected. This disposes of the objection that industry would suffer by their elimination. A representative of Swiss employers, also, who made the statement that industry needed young workers, added that young in this sense meant workers between the ages of 15 and 22.[1] In addition, it was found that during the last few years the number of juvenile employees and factory workers has greatly diminished [2] : everything going to prove that no serious objection to the fixing of the minimum age at 15 could be made from the side of industry.

It would appear that in the vast majority of cases, even if the children have to leave school at 13 or 14, the parents do not allow them to enter industrial life before the age of 15 ; and fill in the intervening period in some other way. This fact calls our attention to two questions :

(1) Is the child ripe for occupational life at 14, and (2) are not the poorest families, those compelled to count on the child earning as early as possible, the hardest hit by the loss of such earnings ?

Effects on Poor Families

We shall deal with the second question first. The Swiss Committee fully recognised its importance. The small number of children under 15 engaged in occupations (only 5,000) shows that the number of parents who would have to be compensated so as to prevent unreasonable hardship is very small.

The Committee, however, rightly points out that this is not the most important aspect of the problem. It lies rather in the question of part-time employment of school children in industry, and in the question of apprentice training.

---

[1] *Op. cit.*, page 38.

[2] A report is quoted from the year 1931 in which it is stated, " While the number of adults for 1931 and 1932 fell off by 10·6 per cent., the number of juveniles was reduced by 28·2 per cent., in the textile industry by 37r2 per cent. and in heavy industry by 40·6 per cent. . . . Our enquiries as to the number of workers revealed the discomforting fact that the crisis has recently also claimed its victims in juvenile ranks, and has forced down the number of juveniles in factories to a low level hardly ever reached before. . . ."

Children attending school in Switzerland are not, as a rule, allowed to do more than three hours' work in their homes, or in occupational employment.

The Canton of Geneva has adopted a remarkable system in this respect. It has made any permission for occupational work during the school period conditional upon the approval of the school medical officer. If this permission is refused the Canton, in the case of necessitous parents, makes good the loss of earnings. The object is to prevent the circumstances of the family pressing too hardly on the child while at school.

Still more numerous are the cases in which, when the child leaves school, apprenticeship training is replaced by immediate occupational work.

The Canton of Geneva has remedied this by means of grants. The Swiss Committee strongly recommends that this example should be followed everywhere, and that funds should be provided for all the three cases cited.

For the rest, it does not by any means condemn the three hours' part-time industrial employment of children. It states that, as shown by numerous investigations (the names of the investigators are given), and as advised by many educational specialists and doctors, this part-time work may prove a valuable counterpoise to the intellectual one-sidedness of school work ; provided, of course, that there be no overwork and that the working conditions are hygienic. It is even suggested that in many instances these children find things easier for them in their occupation later on.[1]

Is the Child Fit for Occupational Work at 14 *?*

But the most important question remains : *Is the child already ripe for occupational work at the age of* 14 ?

The Committee devoted the greater part of its investigations to this question. It is dealt with thoroughly, from the standpoint of the doctor, the educator, the psychologist, the occupational adviser and from the economic standpoint. In the final outcome, the answer is in the negative. Only from the fifteenth year is it deemed possible to speak of the child as being ripe for occupational work.

The investigation starts with an exhaustive enquiry into the nature of this transitional age from the point of view of the physiologist. The nature of the transformation process which we call maturity is analysed. The cause of this transformation process is the entry into activity of the hormones of the generative glands. Puberty is a time of increased growth in height, breadth and bulk. The lengthwise growth may often be considerably in advance of the output capacity of the internal organs. The heart may be overstrained. The dangers of illness during this age are great.

But of greater importance is the question of mental development. " One of the main features in the mental state of this age is the striking deepening of the mind and the emotional life ; external events are experienced with greater intensity, and there frequently appear inward moods which violent external stimuli may convert to fits of depression." It is reported, that " with unfavourable environmental conditions the mental life develops inharmoniously . . . and is characterised by sudden changes . . . passing from arrogance and self-conceit to pusillanimity and even to despair and self-destruction." [1] Coincident with this is the complete transformation in the external conditions of life—" From the regular school life, with its regular rhythm of work and play, recreation and holiday, the child goes out into ' reality,' into an occupation, often into the factory ; where there is an increased bodily strain and greater mental tension, where he is no longer under the supervision of a professionally-trained teacher, but under a superior rarely gifted with an understanding of child nature. During the day's work his accustomed hourly break is lacking ; there will be few essential holidays ; external influences will be uncontrolled, and often bad." [2]

---

[1] *Op. cit.*, page 63.

Such internal and external transformation is fraught with grave danger. The mortality from tuberculosis alone amounts to 50 per cent. of the deaths in the male sex at this age ; while in the female sex it sometimes reaches as high as 70 per cent. of the deaths.[3]

This proportion in a healthy country like Switzerland is very surprising. It is to be explained by the fact that, as the result of premature occupational strain, the young are far more susceptible to infection during their early growth. For in Switzerland, where welfare measures for babies and very young children have attained a high stage of development, they cease suddenly when the children leave school.

These observations are supplemented by investigations made by the school medical officers.

The investigations in Berne showed that among 14-year-old boys some 35 per cent. are considered to be occupationally mature, and at 15 about 60 per cent. In the case of girls, the conditions at the age of 14 are more favourable, and at 15 they coincide with the results for boys.

A second Berne investigation showed that of 15-year-old juveniles 83 per cent. of boys and girls may be regarded as occupationally mature.

In Zürich, the investigations carried out by the educational authority show that in the case of boys of 14 25·5 per cent. are considered occupationally mature, and at 15, 56·5 per cent. The director of the school medical service of the city of Zürich, E. Braun, arrived at the following conclusion : " It is evident that before the age of 15 it is not possible to speak of an occupational maturity in the physical sense. This proves that the raising of the age for entering occupations is not only desirable but, from the medical standpoint, should be demanded as a necessity." [4]

---

[1] *Op. cit.*, page 17–18.

[2] *Op. cit.*, pages 18–19.

[3] *Op. cit.*, page 19.

[4] *Op. cit.*, page 22.

Two Psychological Enquiries

Following upon these investigations the Committee carried out thorough *psychological* enquiries. In this field Switzerland is strong, with two large schools, at Geneva and at Zürich. In order to check the different methods of investigation of the two schools independently, it was arranged to make independent psycho-technical enquiries in Berne, i.e. approximately at the geographical centre-point. These enquiries were carried out at an interval of about seven weeks.

The Zürich School arrived at the conclusion " that the distance covered between the fourteenth and fifteenth year is about one-third of the entire distance to be transversed between the age of 14 and the adult age." [1]

The Geneva School came to the conclusion that the number of occupationally mature juveniles between 15 and 16, as compared with those between 14 and 15, is three times as great for boys and four times as great for girls.

The collective test led to the conclusion, " that for the children of French Switzerland the degree of psychic maturity, which appears to be as essential for entry into industrial life, is on the average only reached at the age of 15½ years, and for the children of German Switzerland only at 16½.[2]

The Committee admits that in spite of this striking coincidence of opinion the basis of investigation was not sufficiently wide. It planned a further investigation on a large scale with about 2,000 juveniles ; but this had to be abandoned. Nevertheless it states its definite conclusion that great importance is attached to the ages of 14–15 as regards physical and psychic development, and that scientists are agreed with practitioners and sociologists in requiring that this maturing period should not be allowed to coincide with the entry into occupational life.[3]

The Problem of " School-weariness "

Again, the standpoint of the educator is dealt with in detail. Not for nothing is the year 14–15 " regarded by the educator as the most difficult," as the " ungrateful age " in which the child frequently offers the greatest resistance to the authority of the teacher and his educative influence, because its mind is unconsciously preoccupied by internal physical and psychic forces stronger than influences from without.[4]

In considering the conclusions, it is admitted that " the majority of juveniles, at the beginning of their occupational time, do not like to recall their schooldays, and are often glad to have left them behind."

The problem of school-weariness met with in every country is also investigated. The novelty of occupational life, the idea of being thought more of, the increase in the feeling of "life," cause the juvenile to surmount the difficulties of occupational life with relative ease. His opinion as to the value of his school life changes, however, as soon as the juvenile sees that he is making no headway in his occupation, a circumstance which is all too frequently the result of an inadequate school training.[1]

---

[1] *Op. cit.*, page 27.

[2] *Op. cit.*, page 28.

[3] *Op. cit.*, page 29.

[4] *Op. cit.*, page 29.

It is admitted that the complaint of the child being overloaded in school is often justified, and that the amount of work required at school has been constantly increasing, while the school hours have not. There is no doubt that this goes to the heart of the whole problem. School-weariness is not encouraging to the idea of the simple continuation of the education beyond the age of 14 on the same lines as before. A change in the school-training, however, in the direction of affording real and lasting preparatory occupational training is only in its initial stages in Switzerland.

Finally, the report deals with the problem from the standpoint of the Vocational Adviser.

In this connection it points out that out of 272 elementary school pupils only 134 failed to change their occupation ; 124 did so once, 12 twice and 2 changed their occupation three times.

The occupational advisers arrived at the conclusion that the 14-year-old boy is much less capable of selecting a suitable occupation than a boy of 15. Nevertheless the problem still remains, because the boy of 15 who has to decide promptly on an occupation on leaving school also finds difficulty in doing so.

In conclusion, the report stresses the fact that in consequence of technical rationalisation work has been speeded up, with the result that body and nerves are subjected to a much greater strain ; the struggle for existence has become harder ; the manager of a big works has less time and leisure to concern himself with the child in his factory.

At this point we must quote one of the Swiss industrialists : "Modern labour-saving devices and the promotion of well-being in our population should first and foremost be directed to benefit the youngest workers, i.e. the children."

The Danger of "School-spoiling"

One of the principal objections against raising the age for entering employment to 15 is the danger of "school-spoiling," that is the danger that another year at school may bring the children into too close contact with purely intellectual ideas and may therefore divert them towards occupations other than manual.

This objection was raised in particular by the secretary of a big farmers' association. But other excellent judges of agricultural conditions do not share his view.

A strong counter-argument is the fact that the four principal agricultural cantons in Switzerland have the longest compulsory school attendance, i.e. until between 14½ and 15. At first sight this is surprising, because as a general rule rural circles are not inclined to favour a long period of attendance at school. But in Switzerland the position is different; and this difference can only be explained sociologically. Swiss agriculture is mainly a peasant agriculture. The family itself works on the peasant holding, either alone or with hired hands. In this class of farming the children have from time immemorial given valuable help throughout the whole year; but especially so during the sowing, harvesting and grazing seasons. Switzerland has made special allowance for this by arranging the holidays to coincide with these seasons. In the Alpine grazing industry, attendance at school is compressed into the winter months. As soon as the children leave school, and choose another occupation than farming, their help is lost.

---

[1] *Op. cit.*, page 30.

Proposals to deal with Consequences of raising Age

In view of all the reasons set forth, the Committee arrived at the conclusion that entry into occupational life in general—and not only in industry and in other strenuous occupations—should only be permitted by law from the end of the year in which the fifteenth birthday falls.

As soon as this standpoint had been reached three proposals emerged, to deal with the possible consequences of this decision:

(*a*) The proposal to extend the school-leaving age in all cantons until completion of the fifteenth year; an extension of from six months to two years, according to the period of compulsory attendance at present in force.

(*b*) The proposal to leave the present period of compulsory attendance unchanged, but to raise the age of admission.

(*c*) The recognition of a gap between the end of the school period and the taking up of occupational work.

In connection with this last, the observations contain some excessively interesting matter. The fear was expressed that to leave a gap of this kind might seriously endanger juveniles, since to have no occupation at that age, it was said, must be dangerous.

The Committee examined this problem very thoroughly, on the basis of experience gained in those cantons where the school attendance period only lasts until the age of 13, and where, therefore, there is a fairly long interval before the children start work.

The Committee raised the question whether there have been unfavourable consequences such as neglect. The answer was: "Nothing of the kind has come to our knowledge: we are convinced that under the conditions obtaining for the last sixty years special preventive measures would have been undertaken had such conditions actually arisen." The "gap year" has had no harmful effects. The children are employed about the house or in the garden, or some other work is found for them. In many cases, even to-day, a sort of year of *agricultural work* has been introduced.

This is, for example, spent by the children from East Switzerland in the western cantons, which are rich in agriculture.[1]

As a second possibility, special mention is made of the auxiliary institutions of pre-apprenticeship workshops in Basle and Geneva. These provide that which juveniles most desire—practical work. One of the best experts on juvenile employment in Switzerland, M. O. Stocker, says of them : " Here the children have an opportunity of testing their own capacity. Simultaneously, they are being introduced carefully to the fundamental conceptions of the working of materials. Pre-apprenticeship training is at once a workshop and an educational institute. It uses the advantages of the apprentice-workshop, but avoids its drawbacks. It takes the physically, mentally and morally immature, provides them during the day with the working hygiene essential at the age of development, gives them school holidays, and finally delivers them in better condition to withstand the strain of occupational life." [2]

For the girls the report recommends a year of practical household training on similar lines.

All these ideas must rank in this connection as applying to voluntary institutions. But they are of great importance as they affect the question of organising a further year of schooling.

Suggestion for raising the School-admission Age

The other possibility, which was fully discussed, was that of raising the school-admission age. In this connection the Committee arrived at an interesting conclusion : " All those competent to judge emphasised the fact that in many cases children are not yet ripe for school at the age of 6."

This conception of " ripeness for school " is investigated with the same thoroughness as the conception of occupational maturity. A distinction is drawn between physical and mental ripeness for school.

Physical Fitness for School

In regard to the physical question it is stated :

> " Sedentary school work leads to a weakening of the muscles and vertebral column in under-developed children. Hence the numerous defects in bearing and carriage observed even during the first years at school. The development of the organs of the senses also is still incomplete in the six-year-old child. The eye of the child is by nature long-sighted. If then it has to adjust itself too early to close work, as is the case at school, this may give rise to derangements of the nervous system. The same remarks apply to the development of the kinesthetic feeling. The six-year-old child has often insufficient command over its voluntary muscles, to the extent required by school work. This often finds expression in derangements of speech and manual clumsiness." A warning is uttered against treating early maturity as genuine intellectual ability. There is then a danger of development without sufficient maturity. " A year more or less for quiet development and undisturbed growth means

---

[1] See YEAR BOOK OF EDUCATION, 1936, page 193.

[2] *Op. cit.*, page 61.

> much: indeed every month is important. The seven-year-old child is, from every point of view, superior to the six-year-old. . . . From the medical point of view, the age of six is therefore to be described as definitely too early for admission to school."

Swiss pedagogic circles subscribe to this view.

> "The experience gained every year with six-year-old children confirms the fact that they are generally not yet fit for school. They tire quickly both physically and mentally, and it frequently happens that a child who has started too young and has been described by its parents as very forward, fails after a short time and is overtaken by other children. Moreover, in many cases the harm done only becomes apparent later, i.e. on transfer to a middle grade school." . . . "An increasing number of far-sighted parents are preferring to give to the child one more year free of school, when admission to school is possible at the age of 6 or 6⅓ year; which allows the child another year to recruit its strength undisturbed."

The example of the city of Zürich is cited, where the number of exemptions from school attendance, i.e. the voluntary postponement of the age of admission from 6 to 7, increased between 1901 and 1934 from 5 to 25 per cent.[1]

This attitude of the medical and pedagogic authorities, and of the parents, in a city possessing a highly intelligent educational system must give us food for thought. The opinion has been rapidly gaining ground in many countries that too early admission to school is as dangerous as too early age of entry into economic life. And now the ranks of those who support this view have been joined by a number of leading authorities among doctors and psychologists in Switzerland. The school medical officer, Braun, of Zürich, holds the view that the earliest age at which children should start school is 6 years and 4 months. This would mean an actual starting age for the majority of the children at between 6½ and 7½ years. The recognition has made such headway in Switzerland that serious attempts are now being made to raise the age of school admission in seven large cantons, especially in Lucerne and St. Gall. Serious investigations might well be made in this direction in other countries. The results should be profitable.

Suggestions for Use of Extra School Year

In summarising, the Committee lays it down that, as a logical consequence of the later age of entry into industrial life, the compulsory school period should be *extended to the fifteenth year*.

This raises the most important question in the whole problem, one which even in Switzerland has not progressed beyond the stage of thoughts and wishes: How is this new school year between the ages of 14 and 15 to be employed?

It is agreed in Switzerland that, in view of the disinclination for intellectual study which exists in most cases, and of the school-weariness in many, a simple continuance of the ordinary teaching is not a right solution ; on the contrary, it might prove harmful.

---

[1] See *op. cit.*, page 54 and following.

A solution is sought which will give the young people a new impulse, which will respond to the urge for activity particularly strong during this transitional age, and which will constitute when possible some preparation for the occupational life, from the moral no less than from the technical standpoint. " Investigations have shown that 14-year-old children long to do something, to make something, no longer merely to listen." The school in its present form does not fulfil this task. The opinion is quoted of an eminent pedagogist that " the elementary school has in general become ' problematic.' " And this chiefly because the best elements have passed on to the secondary school. The school medical officer of Zürich, Dr. Braun, whom we have repeatedly quoted, confirms this view.[1]

The Committee states that it was unable to go fully into this problem. This is regrettable ; and it is to be hoped that such an important question will soon be thoroughly investigated in the unique environment of the Swiss school system. Any solutions suggested would be of real value in other countries. There is no problem connected with the elementary school as vital or as much in need of illumination. The Swiss circles represented on the Committee are fully alive to the fact ; their demand for the addition of one or, if necessary, two elementary school years is made " upon this understanding " [2]

Summary of Committee's Conclusions

In conclusion, we may sum up the findings of the Swiss investigation briefly as follows :

(1) Children in Switzerland do not reach a point of physical and mental maturity such as enables them to satisfy the increasing demands of occupational life without harmful consequences until the end of their fifteenth year. In the case of girls this condition supervenes ordinarily on completion of the fifteenth year ; in the case of boys, even later.

(2) The demands imposed by present-day occupational life have increased. For this, if for no other reason, an extension of education in the elementary schools until the children have reached the age of 15 has become necessary.

(3) For poor families, to whom the earnings are important, a relief fund must be established, out of which an amount corresponding to the child's earnings should be paid to the parents. Poverty should, under no circumstances, constitute a reason for earlier entry into industrial life.

(4) So long as a gap is left between the ages of leaving school and of starting work, arrangements must be made to provide the child

---

[1] *Op. cit.*, page 53.

[2] *Op. cit.*, page 53.

with occupation and with further education, of the character of a pre-apprenticeship.

(5) The idea of education should be continued and re-enforced even after the child has started work. " Intensive efforts must be made among employers and employees to ensure that the youngest employees are treated with more consciousness of an educational responsibility than is usual at present ; and that all adults employed in a business are endeavouring to make the transition from school to occupational life easy for the children. Towards the end of every school year propaganda to this effect should be carried on in businesses, in factories and among workpeople."

CHAPTER NINE

Two Great International Educational Organisations

A. The International Education Bureau, Geneva

THE first move towards international agreements, organisations and movements began in the first decades of the nineteenth century with the declaration of neutrality of Switzerland and the simultaneous formation of the first Peace Societies. Since that year the Annual Register of international movements has constantly contained new associations of a political, social, religious or scientific character.

In endeavouring to trace back the beginnings of the great international education movements, the educationist finds, however, that a genuine movement in this domain only set in at a much later date. The first French Under-Secretary for Public Education, Marc-Antoine Jullien,[1] did, indeed, suggest the setting up of an International Commission on Public Education more than one hundred years ago, but this proposal failed to elicit any response.

Many years went by before the Secretary of the Educational Department of the City of Zürich, M. F. Zollinger, again put forward the same proposal in 1901. Once again it failed to find an answering echo.

It is to an American lady that the merit is due of having given the decisive impetus. The Secretary of the American School Citizenship League, Mrs. Fannie Fern-Andrews, approached the American Government in 1912, with the idea of calling an International Conference on Education. It was planned that, following the conference, an International Education Bureau should be set up, entrusted with the special task of investigating questions relating to education and instruction in international relationships.

The American Government made a proposal to Holland to call such a Conference. The Dutch Government accepted the proposal and sent out the invitations. The Conference was to be held in September 1914, and sixteen countries, including all the large European Powers, with the exception of Germany, had accepted the invitations and had already nominated their delegates.[2] This beginning, so promising of success, was upset by the War.

The Deputy Director of the International Bureau, M. P. Rosello, reports that during the Peace Conference steps were taken with a view to reviving this movement ; these steps failed. In the League of Nations Covenant dealing with political, social and economic problems, there is no mention of Education.[1]

---

[1] Communication from the President of the Executive Committee of the International Education Bureau, M. Paul Lachenal, Chairman of the Educational System of Geneva, at the sitting of the Fifth International Conference on Public Education in Geneva, on July 13th, 1936.

[2] See P. Rosello, *Le Bureau International d'Education*, Geneva.

The Foundation of the International Bureau

It remained for a few courageous pioneers of education grouped about Geneva to take the decisive step. They founded, in December 1925, the International Education Bureau, in the beginning as a purely private association. These pioneers were firmly convinced of the necessity for this task, and obtained the support of other educational circles in interested countries.

Their intention was to set up an Information Bureau, which was to act as a clearing office for reports relating to education received from individual countries. They attempted successfully to apply to educational matters the same methods which had already been evolved in Geneva for dealing with international questions. In doing so they fortunately adhered more closely to the working methods of the International Labour Office than to those of the League of Nations, i.e. political questions were entirely eliminated from the very outset. Every school of thought and every voice had the right to be heard ; this ensured success to the young enterprise.

The International Conference held by the International Education Bureau in Prague, in April 1927, with the support of the Czech Government, and at which the fundamental problem, " Peace through the School," was discussed, aroused, above all, justified interest among the widest circles.

An Important Amendment of its Constitution

Encouraged by this success, the International Education Bureau proceeded in the summer of 1929 to amend its Constitution. It was established as a legal corporate body by the Government of the State of Geneva. The Governments of the three States of Geneva, Poland and Ecuador created the new corporation, and Spain, Egypt and Czechoslovakia became members a year later. Membership is open to all countries, educational institutions and other public bodies, who pay an annual subscription of Frs. 10,000. Thirteen States have now become members, constituting the signatory Powers of the Constitution, among them being Germany, the Argentine, Egypt, Spain, Italy, Portugal, Switzerland and Czechoslovakia. These States represent populations totalling about 250,000,000 people. The youngest member is the Argentine, which joined the International Education Bureau in 1936, pursuant to a resolution of its Parliament and Government. The invitations to the annual conferences are sent out by the Swiss Government through the ordinary diplomatic channels to all Governments of the world, and arouse interest far beyond the ordinary circle of the members. Thus, the 1936 Conference was attended by delegates from forty countries, including Germany, the Argentine, Belgium, Denmark,

---

[1] *Op. cit.*, page 4.

Spain, U.S.A., France, India, Italy, Japan, Norway, Holland, Poland, Portugal, Sweden, Switzerland, Czechoslovakia, South Africa and Yugoslavia.

The Object of the Bureau

The object of the International Education Bureau in its new form is, according to its articles, to serve as an information centre for all matters affecting education. It observes the strictest neutrality in political, philosophical and religious questions. Documents and surveys are prepared in a spirit of strict scientific objectivity.

The task of the secretariat consists in the compiling of documents of all kinds relating to education and in conducting research work in every domain relative to the science of education, and in particular in instituting investigations into special questions.

The Annual Summer Conference

The principal event is the regular *Summer Conference on Public Education.* In opening the International Education Conference in 1936, the first Director of the Bureau, Prof. M. Piaget of Geneva, was able to point with justifiable pride to the fact that the work, which he had carried on, had in ten years grown from small beginnings to the reality of a great international organisation, holding now its conferences in the former Palace of the League of Nations on the Quai Wilson in Geneva, the building which the League had recently vacated.

At the same time there is to some extent a tragic aspect to this symbolism. It is impossible to gauge what the international situation would have been to-day if the sequence of events had been reversed, if the educational Powers of the world had moved forward before the League of Nations came into being, instead of following it, by ten years. Nevertheless, the 1936 Conference once more revealed an extraordinarily intense and fruitful harmony and peaceful collaboration even between countries which otherwise live in an atmosphere of painful tension, or stay away from Geneva altogether.

Naturally, the task of the International Education Bureau is an easier one, since no political resolutions are adopted. It does not in any way interfere in the autonomy and independence of the member States. Its methods are those of the educationist in general : to replace by means of persuasion and conviction what is not so good by something which is better.

Although these beginnings may, at first sight, seem small, their effects are in the long run extraordinarily far-reaching.

Education divorced from Politics

The International Education Bureau is free from the crises which so often hamper the League of Nations in its work, because it is a completely autonomous international organisation, and is in no way bound by the League of Nations Covenant. This may add to the difficulties of its work in connection with certain problems, but during the present transition period, at any rate, it possesses great advantages. Too close an inter-connection between education and politics always brings danger in its train, and the autonomy of education has long been a cherished dream in the world of educationists. Here it has become a reality in the international field.

Close and friendly relations are maintained with the League of Nations, and especially so with the International Labour Office. These relations have proved invaluable to the work of the Bureau, a fact which was, to quote only one example, in evidence in connection with the problem of juvenile unemployment.

The work of the International Education Bureau is astonishingly wide in scope. Its publications in the last year alone amounted to more than 1,800 pages (the year before they represented 2,355 pages). Enquiries and visitors are received from all parts of the world ; all of them find an answer to their questions at the International Education Bureau.

The whole of the work is done in exemplary fashion by a small staff and with modest means, in premises formerly a school.

International Enquiries and Investigations

The most important task of the Bureau consists in dealing with great problems, which are solved by means of international enquiries and investigations, and with the aid of specialists scattered throughout the whole world. The majority of these investigations are undertaken at the instance of the annual conferences, or as a result of proposals and enquiries from the various Governments.

Below is given a list of the subjects which have been thoroughly investigated in this way during the last three years. The years indicated are those in which the results are available, but the actual work dates much further back.

1934 : (1) Work and school holidays.
(2) Savings achieved in the budgets of public education.
(3) The extension of the general compulsory school attendance.
(4) Admission to higher-grade schools.
(5) The Polish school reform.
(6) The position of married women in education.

1935 : (1) Self-government in schools.
(2) Group work in schools.
(3) Professional training of teachers in higher-grade schools.
(4) Professional training of teachers in elementary schools.
(5) The Councils of Public Instruction.

1936 : (1) The organisation of special instruction (for physical and mental defectives, deaf-mutes, backward children).
(2) Organisation of instruction in rural areas.
(3) Legislation on school buildings.
(4) Children's newspapers and publications.

Detailed printed reports containing from 80 to 250 pages each are available in connection with each of these questions.

The Method of Procedure

Those who follow the burning problems of the modern teaching and educational systems of the world will find some of the most important questions dealt with here. These questions are incessantly cropping up at national and international conferences. Here, however, they are not left, as it were, to a chance speaker at the Conference or else compressed into a disproportionately short space of time during the debates. The procedure is entirely different.

As mentioned above, the International Education Bureau endeavours to follow the methods which have been evolved by the great official international institutions at Geneva. It endeavours to combine a strictly scientific method with a comprehensive survey covering the whole world.

The method adopted is based on a detailed questionnaire, dealing with specific problems, which is sent out regularly. This questionnaire always reveals a thorough grasp of the particular subject, and is accompanied by remarks intended to facilitate the answers. In addition, the Bureau also has recourse to the advice of experts in the various countries.

Some countries show their keen interest by giving extremely detailed replies, while others return answers which are too sketchy to be of real value. The Bureau itself is unable to make good these defects ; and this accounts for the lack of uniformity which is apparent when comparing the reports. Anyone acquainted from personal experience with the various subjects connected with education often finds in these reports gaps or descriptions which are not sufficiently explicit. Thus, for instance, in dealing with the question of agricultural training, hardly any mention is made of the complicated organic system of agricultural instruction in Denmark, closely allied with the People's High Schools and the Co-operative Societies. Or again, in dealing with the question of school buildings, no clear picture arises of the fascinating beauty, utility and dimensions of the new school buildings in England. There is nothing in the Report to suggest to the reader that many of them stand amid gardens and playgrounds often covering several acres of ground.

These remarks are not intended as a criticism. They merely draw attention to shortcomings which seem inevitable in the beginning of such an encyclopædic experiment covering such a wide domain as that of education.

Generally speaking, the results achieved are deserving of nothing but the highest praise. The foundations are being laid here for an entirely new collective method of viewing problems. The comparative science of education cannot furnish results without these fundamental reports.

These reports, however, furnish in many instances a vivid picture of educational problems far beyond the immediate circle of those connected with the teaching profession. Politicians, economists, theologians and people with literary interests can find here, as in a mirror, the variegated spectrum which is made up of the various spheres of education throughout the world.

This is shown very clearly by the two following short reports dealing with special subjects, both of which are taken from the results achieved by the work done in 1936.

(a) Report on the Problem of Education in Rural Areas

The problem of education in rural areas was fully debated by the International Education Bureau during the fifth Conference on Public Education, in the presence of delegates from more than forty countries.[1] In addition to the debates, the results of the preliminary investigations were assembled in a carefully compiled volume, which was handed to the members of the Conference.[2]

On the basis of these data, the Education Conference drew up proposals and resolutions, the most important points of which were approximately as follows :

Proposals and Resolutions

(i) The rural population in the various countries constitutes a source of physical health and a strong moral force. An effort must be made everywhere to keep it uncontaminated. Above all, the depopulation of the countryside must be combated by every possible means.

(ii) The educational system is often accused of drawing young people away from the land. This reproach is only partly justified, although it must be admitted that there is a need for education to insist that children should realise more vividly the importance, both social and intellectual, the dignity of country life, and to furnish them with the scientific knowledge necessary for the exercise of rural occupations. Rural education must not, in principle, be on a lower grade than urban education, and equal facilities must be given for higher education.

(iii) Instruction, too, should be maintained at the same level, except that here the " centre of interest " must be sought for in rural life itself, and the teachers should make use of every possible means of instruction in order to awaken in their scholars a taste for rural life. Urban and rural education should be under the ægis of one and the same Ministry.

(iv) The higher-grade schools in particular should provide the scientific bases which agriculture needs to-day. The drawbacks of the single class schools should be remedied by means of central schools. Those children who desire to continue their studies on completion of the compulsory school attendance should be given an opportunity of doing so, having special regard to the preparatory subjects for agriculture.

---

[1] Conférence internationale de l'Instruction publique, Geneva, 1936, *Procès-verbaux et Resolutions.*

[2] *L'Organisation de l'Enseignement rural,* published by the International Education Bureau, No. 48, Geneva, 1936.

(v) Teachers in rural areas should not be on a lower plane as compared with urban teachers. Those teachers, both male and female, who desire to devote themselves especially to agricultural continuation school training should be given special opportunities for acquiring practical experience in agriculture.

(vi) Young Farmer clubs, travelling libraries, rural radio broadcasts, cinematograph performances, instruction by correspondence and similar organisations ("Œuvres Pèri-Scholaires et Post-Scholaires") should receive special attention.

Attempts to revitalise Rural Education

The documents and debates show that in many countries the renaissance of rural education is making ever-increasing progress with the new respect for rural occupations. In Italy the theory is advanced that the countryside rests on a basis of truth and wisdom. Colombia has even gone so far as to transfer its urban schools back into the country. It is emphasised that contact with reality is much more intense in rural schools. In many cases much more intensive individual work is done in the rural schools. The latest methods of instruction are, above all, applied where the instruction has to be divided up on account of the restricted number of teachers available. It is reported from Poland that 15,000 new teachers would be required in order to meet the demand: during last year only 2,000 were appointed.

Summarising, it may be said that a very serious attempt is perceptible everywhere, not only to idealise rural education, but actually to place it on a better, more up-to-date, foundation.

In a number of countries the method has been adopted of giving instruction in rural schools by means of correspondence school methods and in this way to bring the curriculum in these schools into line with that of the higher-grade schools. Pupils who are unable, for economic reasons, to go and live in the town will in this way be afforded the same advantages as urban pupils.

On the other hand, the experiment made by the German "Landjahr" in 1935, of transferring more than 30,000 town children into rural surroundings for a whole year, has aroused great interest.

From France come reports of travelling workshops, with the aid of which courses are given in rural handicrafts to meet the requirements in field, stables and home.

It is generally recognised as a fundamental rule that handwork for the children is not merely an economic necessity of the farming system, but that it provides an important pedagogic possibility. This has been taken into account by making the school holidays coincide with the seasons in which the main work on the farms has to be done.

This new conception of the value of rural instruction and of rural life can be promoted to an extraordinary extent by the circulation of books written by authors who portray life in the countryside.

The reports draw particular attention in this respect to France. They might with equal value have cited the example of the rural renaissance which for more than a century has been such a vital aspect of life in Denmark.

(b) The Question of Children's Newspapers and Children's Magazines

In 1931 the Council of the International Bureau of Education instructed the Secretariat to institute a thorough investigation into the question of juvenile literature, and especially newspapers and magazines. The extraordinarily valuable and interesting report of these investigations has now been submitted.[1]

From this report we learn that in the majority of countries juvenile newspapers and periodicals are widely circulated. In Germany they number 150, in Czechoslovakia about 100, in Poland about 300, in Spain about 80 and in France about 100. In England and America the number of juvenile publications is impossible to estimate.

The juvenile publications which have the greatest international circulation are those of the Red Cross, of which there are twenty-nine in the various countries. These twenty-nine publications have arranged for a valuable interchange of articles and contributions.

A number of these periodicals have an astounding circulation. It is impossible to give details regarding the number of copies printed of the English juvenile publications, which are among the oldest in the world, but the American magazine *American Boy* has a circulation of 250,000 copies, the French magazine for boys, *Benjamin*, 200,000 copies, and the magazine for girls, *Semaine Suzette*, 170,000, whilst of the Italian *Corriere dei Piccoli* 250,000 copies are printed. The greatest Polish publication has a circulation of 50,000 copies, and the largest Czechoslovakian magazine has an impression of 70,000.

The Relative Value of Juvenile Publications

The question has been raised as to the value of juvenile publications ; opinions on this subject are extraordinarily divided.

Many experts are opposed on principle to juvenile publications, others stress their outstanding effects and possibilities. Publications which are devoted to a specific group are better than those which appeal to an amorphous mass.

The question as to which publication is the best is being closely investigated. One of the best connoisseurs of juvenile publications in America, who can look back on twenty-five years' work in connection with one publication, writes : " When I was writing I never thought specially of children, but merely of intelligent beings who desire to acquire knowledge and are interested in the great adventures of the World." Anatole France, in the following quotation, arrives at similar conclusions: "When you write for children, do not adopt any special style. Think well and write well. Make everything in your articles vivid, great, wide and masterly. That is the secret of pleasing your readers." [1]

---

[1] *Les Périodiques pour la Jeunesse*, Geneva, 1936. 103 pages.

At one time it was believed that in writing for children it was necessary to preach. The modern expert is definitely opposed to this on the grounds that any form of moralising is rejected by the children. Even religious periodicals, if they desire to achieve an effect on youth, have to disguise their moralising.

The Need for a New Ideal

The need to seek a new ideal which will make an appeal to youth is becoming increasingly apparent. A Bulgarian collaborator postulates as a preliminary necessity in order to achieve this effect: a mind filled with nobility, gentleness and love, and a keen intelligence. In America the ideal is represented as the attitude of the elder brother, adroit and full of experience. In order to influence youth, courage, loyalty and co-operation are indispensable. Everything which is too instructive bores the children and loses its effect. The dynamic force of life, on the other hand, wherever it is represented intensely and in an interesting way, appeals to the enthusiasm of youth. This is responsible for the tendency to take an interest even in criminal cases and accidents. When young people read newspapers and periodicals belonging to adults, they look for these things first. The class of literature known in England as "Penny Dreadfuls," and which is so widely distributed in every country, is based on this tendency. The best juvenile publications seek to refine these tendencies and to guide them into the proper paths. The greatest effect is achieved everywhere by sporting and topical events, thrilling incidents, technical subjects, heroic voyages of discovery, adventure and nature. Anything published in a paper for juveniles merely to fill up space is not read and detracts from the effects of the publication.

There is a general tendency to reject everything historical and instructional when couched in dry, uninteresting language.

Great unanimity exists between these opinions from the various countries, which shows that we are here confronted with a general phenomenon of youth, or at any rate of modern youth, and not merely with a phenomenon peculiar to individual countries.

The Place of School Periodicals

A special problem consists in the periodical which is actually produced in the school, partly by the children themselves.

In this respect the leading place is occupied by the work of the French educationist, C. Freinet, who has achieved great success with a periodical printed in the school, regarding which he reports as follows: "Each class carries on a regular, constant exchange of correspondence with another class. We print the periodicals in the class itself, and at the same time always print a copy for the pupils in the corresponding class. This permits of a constant, as it were daily, comparison of the life of the two classes. Each of our scholars can, in fact, select a little comrade in the corresponding class, with whom he can also maintain personal contact, in order to exchange letters and documents."

---

[1] *Op. cit.*, page 24.

It is reported that this system of a privately produced and privately printed newspaper has spread particularly from France to Spain. Out of forty-three Spanish school newspapers, the majority make use of the method adopted by C. Freinet.

A detailed report is given regarding the French publication *En Herbe*, founded a few years ago. It was started by a girl, 14 years of age, and to-day has a large circulation. In accordance with the aim of its youthful publisher, it is intended to deal with problems in which modern youth are intensely interested and which youth will one day be called upon to solve. Famous men, scientists and authors, are asked to express their opinions on these burning problems.

The publishers are all young girls of the same age. They conduct investigations of an artistic, literary, social and even pedagogic character. They deal in great detail, for instance, with the question of the excessive burden of school work. "We are almost the slaves of our work. It is almost impossible for us to take up anything else. . . . Is our sole task to work for the school? The class absorbs us to the point that we no longer have sufficient leisure. It is not the duties and the tasks which oppress us, but the fact that we no longer have any time to ourselves."[1]

Juvenile Clubs attached to Periodicals

A special section is devoted to the trend of ideas of the various big juvenile publications. The example of the *Boys' Own Paper* seems to have made itself felt in other countries. As is well known, this paper has founded a club for its young readers, and devotes itself to high ideals and conceptions of life. It represents to the boys the ideal of a genuine, active, manly life, of working for the good and the peace of the world.

The Report of the International Bureau of Education goes on to say that the clubs which have been started by the large juvenile papers in various countries inspire their young members to take part in philanthropic work and to devote their time and energy to tasks which satisfy both the need for occupation and devotion. The publications of the Boy Scout and Red Cross Movements are, in this respect, only a partial phenomenon. The big independent French paper for boys, *Benjamin*, frequently appeals, obviously with great success, to its 200,000 young readers to be "loyal, zealous, assiduous and jolly." It is astonishing how successful this new technique is in rendering effective a method of education which frequently fails in the schools.

---

[1] *Op. cit.*, page 335.

In regard to this same French juvenile publication *Benjamin*, it is stated that nearly every number contains a surprise. The 200 best scholars in France are invited to take a trip to Paris; on another occasion 200 of the best scholars in a province were given the same outing. Four hundred young girls between 14 and 16 organised, unaided, a banquet. Tours of the Mediterranean are also arranged, on which even the parents can accompany the youthful members of the club.

Another French juvenile paper has provided its readers aged 8 to 14 with regular opportunities for speaking from Radio Paris, and of frankly expressing their opinions. *Benjamin* again has set up a special section in order to stimulate the inventive faculties of its readers. If one of the latter has an idea for a new invention, or has worked out a scheme, he can publish it in a special section of the paper. In connection with other juvenile papers, it is reported that first essays at poetry or prose are published in the same way. In the majority of cases experts give opinions on the work and give advice to the readers.

This short extract gives an idea of an important new field of education. The Report is supplemented by a bibliography covering more than thirty pages.

(c) Other Activities of the Bureau

The activities of the International Bureau of Education are not, however, confined to these large-scale investigations. At each annual International Conference, the delegate from each country renders a detailed report on the position of education in that country. With a view to the preparation of these reports, a large number of fundamental questions are submitted in advance by the International Bureau of Education. All the reports open with a statistical survey; they also deal with all the various domains of schooling and education, the question of training teachers, moral training, etc. Here, all the burning problems affecting each country can be reported on and brought up for discussion. These questions and answers often become extremely lively and impressive. The problems of overcrowding in the higher-grade schools and in the teaching profession, the dependence of the school on politics, Budget economies, the selections for higher-grade schools, revision of curricula, the education of young girls, occupational education, school buildings, radio instruction, exchange of teachers and scholars, salaries, school canteens, special conferences, scientific researches of various kinds, school hygiene. This list is merely a brief selection from the problems with which the Conference is called upon to deal.

All these reports are published every year in the *Annuaire International de l'Education et de l'Enseignement*,[1] which is thus becoming a more and more indispensable world-wide survey of the position of education and its development.

The Bulletin of the Bureau

Another publication is the *Bulletin of the International Bureau of Education*, in which are published short topical items of news from the various countries. In addition, each number contains a bibliography, extending to twenty pages, of the most important books and periodicals connected with education, published throughout the whole world. To enable it to be used in a card index this bibliography is printed on one side only.

Anyone who peruses the publications for one year, covering about 2,000 pages, find himself confronted with an undertaking of fundamental importance to the educational life of the world. Here a successful attempt is being made for the first time to provide a vast review of the leading tendencies in the educational world. It permits of tracing the great general tendencies in educational life in their ebb and flow. Thus the International Bureau of Education is to-day in a position to report that, generally speaking, the system of restrictions imposed on State funds for education is at an end, and that from this year onwards these allocations may be expected to increase. The extraordinary influx of children to higher-grade schools is increasing in the same way. Out of 8,000,000 children in America between the ages of 14 and 18, more than 5,000,000 are to-day in secondary schools. In many countries the problem of overcrowding in secondary schools is becoming increasingly acute. The movement for continuation training in their profession for teachers is growing in many countries. In Poland about 70,000 teachers attend evening continuation schools.

If we closely peruse the pages of these astonishing publications, it is easy to understand why the representative of Chile on the Executive Committee, viewing the question from a South American standpoint, described the work of the Bureau as "a miracle and a reason for hope in the future."

In conclusion, mention must be made of one astonishing fact:

An examination of the list of Member-States and the States which take part in the Conferences shows that, besides the U.S.A. and many South American States, nearly all the great Continental Powers are represented. Russia sends no representatives. Among the countries belonging to the British Commonwealth, only India, Ireland and South Africa were represented in 1936, only Australia (Victoria) and Canada in 1935, and only Ireland in 1934. England is absent from the circle of the International Bureau of Education and from that wider circle of States which send their representatives to the Conferences.

---

[1] E.g. *Geneva*, 1936, published by the Bureau international d'Education, 470 pages.

This is greatly to be regretted, because England would in any case be in a position, from the vast sphere of her experience in matters educational, to furnish valuable contributions.

B. The International Bureau of Technical Instruction

In regard to the representation and participation of England, however, there is another organisation which is in a much more favourable position : the International Bureau of Technical Instruction, 2 Place de la Bourse, Paris. England's representative on the Council of Administration—on which Denmark, Belgium, Egypt, Spain, France, Germany, Italy, Holland and Poland are also represented—is the outstanding educationist, Mr. A. Abbott, who is also the Vice-President of the International Bureau of Technical Instruction. At the last International Congress in Barcelona in 1934, the Members of the Honorary Committee included the President of the Board of Education and a number of distinguished English educationists.

For the rest, the structure of the International Bureau of Technical Instruction is similar to that of the International Bureau of Education. It is something between a private body and an official League of Nations' organisation. Its President is the present General Commissary for the Paris International Exhibition, 1938, M. Edouard Labbé. The General Secretariat is in the capable hands of M. Lomont, the Director-General of the Ateliers Ecoles des Chambres de Commerce in Paris.

The International Bureau of Technical Instruction deals with all problems affecting technical education throughout the world. Its Congresses, which are held once every two years, constitute the most important event in this particular sphere.

The 1932 Congress was held in Brussels, and that of 1934 met in Barcelona.

The questions on the Agenda at Barcelona were :

(1) The part played by technical instruction from the economic and social point of view.

(2) Occupational orientation (i.e. How can the last year at school be utilised in order to serve as a vocational orientation ?).

(3) Apprenticeship training, programme and methods of practical workshop training, technology, its pedagogic principles, etc.

(4) The training of apprentices, and unemployment.

(5) The higher technical professions, their training, and the safeguarding of the title of engineer.

(6) The articles of apprenticeship.

(7) The technical press and technical instruction system.

The Congress of the International Bureau of Technical Instruction, which was held in Rome towards the end of December 1936, included the following problems in its Agenda :

(1) The terminology of technical instruction.

(2) The financing of technical instruction by the various bodies (State, Provincial Authorities, Municipalities, Chambers of Commerce, professional organisations, etc.).

(3) Technical instruction and economic life.
(4) Occupational orientation and its continuation.
(5) The training of workshop staff entrusted with the practical instruction.
(6) The preliminary training of woman and her place in economic life.

Detailed reports are regularly issued giving the results of the Congresses. The Report on the Barcelona Congress comprises two volumes, containing more than 1,400 pages. It contains a large number of important reports dealing with the problems of technical instruction throughout the whole world.

THE EDUCATIONAL GUIDANCE OF THE SCHOOL CHILD

SUGGESTIONS ON CHILD STUDY AND GUIDANCE, EMBODYING A SCHEME OF PUPILS' RECORDS

This book is an account of experiments conducted by the Teacher's Advisory Committee of the Wiltshire Education Committee, assisted by the University of London Institute of Education, concerning a new scheme of Pupils' Records.

The book explains a Rating Scale for Personality, Intelligence, Attainments, Interests, Home Circumstances, etc., and gives suggestions on making the record, on its interpretations, and on the measures which may be taken to deal with difficulties or weaknesses.

Price 3*s*. 6*d*. net, post free 3*s*. 10*d*.

The four Pupils' Record Cards designed for use with the scheme are as follows:

1. Infant Admission Card
2. Infant Card
3. Junior and Senior Card
4. Measures Taken Card

Each card measures 13 ins. by 8 ins. Price 1*s*. per doz., 1*s*. 3*d*. post free. Quotations for quantities on request.

THE PROBLEM OF THE JUNIOR SCHOOL

IN ENGLAND AND WALES

This discussion of the Junior School consists of six essays on various aspects of the subject, each essay being contributed by an author with practical experience of his subject.

INTRODUCTION
Professor H. R. Hamley, Professor of Education, University of London Institute of Education.

THE NURSERY AND INFANT SCHOOL AS VIEWED FROM THE JUNIOR SCHOOL
Miss C. M. Collier, Hockerill Training College, Bishop's Stortford.

THE POST-PRIMARY SCHOOL FROM THE POINT OF VIEW OF THE JUNIOR SCHOOL
S. H. Cracknell, Headmaster, Dalmain Road Junior School, London.

THE JUNIOR SCHOOL FROM THE POINT OF VIEW OF AN ADMINISTRATOR
J. Compton, Director of Education, Ealing Education Committee.

A CRITICAL VIEW OF THE JUNIOR SCHOOL
C. H. Hecker, Headmaster, Wilson's Grammar School, London.

THE JUNIOR SCHOOL AND THE PROBLEM OF CO-ORDINATION
Harley V. Usill, General Editor "The Year Book of Education."

Price 1*s*. 6*d*. net, post free 1*s*. 8*d*.

EVANS BROTHERS LIMITED
Montague House, Russell Square, London, W.C.1

A GUIDE TO INTELLIGENCE AND OTHER PSYCHOLOGICAL TESTING

By E. P. ALLEN HUNT

Seconded from the National Institute of Industrial Psychology to the Staff of the City of Birmingham Education Committee

and PERCIVAL SMITH

Vocational Guidance Officer, City of Birmingham Education Committee

This book deals fully with the purpose and meaning of psychological tests, the dangers of their misuse, the methods of applying individual and group tests, and the interpretation of results. Chapters are also devoted to Tests of Special Aptitudes, Temperament and Its Measurement, Hints on the Technique of Testing.

A list of Definitions of Terms and a Bibliography complete this book, which is invaluable to everyone concerned with the subject of Intelligence Testing.

Price 2*s.* net, post free 2*s.* 3*d.*

NOTES ON EDUCATION

By E. T. CAMPAGNAC, M.A.

Professor of Education in the University of Liverpool

These notes provide the most practical way of obtaining two things:

(1) An Introduction to the Art of Teaching.

(2) An Introduction to the Philosophy of Teaching for the Students' Examinations.

Professor Campagnac seeks to arrive at a definition of education by the study of definitions of education taken from the world's writers through the ages—from the Bible, from the works of Greek philosophers, from Shakespeare, Milton, Kant, and from modern writers, including the Board of Education's Code for Elementary Schools.

These very diverse definitions are then related to to-day's problems in education in a discussion which bears the stamp of the authority born of Professor Campagnac's long and wide experience amongst teachers and taught. A number of pages are left blank for students' notes.

Price 1*s.* 6*d.* net, post free 1*s.* 9*d.*

EVANS BROTHERS LIMITED
Montague House, Russell Square, London, W.C.1

THE PSYCHOLOGICAL ASPECTS OF CHILD DEVELOPMENT

By SUSAN ISAACS, M.A., D.Sc.

Head of Department of Child Development, University of London Institute of Education, and Psychologist to the London Clinic of Psycho-Analysis

Dr. Isaacs offers a bird's-eye view of the most significant recent advances in the psychology of infancy and early childhood, and the broad relations between the different fields of research in this subject. The book is built on the lines which the Author has for many years found fruitful in helping teachers to gain understanding of children.

The introductory chapter discusses the scope of the subject. The second chapter describes recent research and advances in the study of child development, while the third chapter deals with the practical educational bearing of the information made available by research. A valuable classified bibliography completes the book.

Price 1*s*. 6*d*. net, post free 1*s*. 7*d*.

THE EDUCATION OF BACKWARD CHILDREN

AND JUVENILE DELINQUENCY IN ENGLAND AND WALES

The education of backward children is a problem engaging the earnest attention of every educationist. Teachers and administrators will find, in this collection of essays, much valuable information and fresh viewpoints expressed by acknowledged authorities on the subject. The contents of the book are as follows :

THE EDUCATION OF THE BACKWARD CHILD : Introductory Survey ; Some Psychological Considerations ; Education of Backward Children ; Causes of Backwardness ; Methods of Diagnosis and Organisation ; Teaching Methods for Dull Children ; Administrative Problems and the " C " Child ; JUVENILE DELINQUENCY : General Survey ; Psychological Aspects of Juvenile Delinquency.

Price 1*s*. 6*d*. net, post free 1*s*. 8*d*.

EVANS BROTHERS LIMITED
Montague House, Russell Square, London, W.C.1

THE
TESTING OF INTELLIGENCE

General Editor
PROFESSOR H. R. HAMLEY
Professor of Education, University of London Institute of Education

With a Foreword by SIR PERCY NUNN
Formerly Director of the University of London Institute of Education

CONTENTS:

INTELLIGENCE AND INTELLIGENCE TESTING
Prof. H. R. Hamley, University of London Institute of Education.

THE USES OF INTELLIGENCE TESTS
Prof. H. R. Hamley.

MENTAL TESTS FOR THE PRE-SCHOOL CHILD
Miss Hilda Bristol, Psychological Centre for School and Home, 28, Gower Place, London.

THE USE OF STANDARDISED TESTS IN ENGLISH SCHOOLS
John W. Collier, Assistant Director, Northumberland Education Committee.

MENTAL SURVEY OF SCOTTISH CHILDREN
Dr. R. Rusk, Director, Scottish Council for Research in Education.

SOME USES OF INDIVIDUAL TESTS IN SCHOOLS IN SCOTLAND
Dr. D. Kennedy Fraser, Psychologist to the Glasgow Education Committee, and Lecturer in Charge of the Training of Special School Teachers in Scotland.

DIAGNOSTIC TESTS FOR SPECIFIC DISABILITIES IN SCHOOL SUBJECTS
Dr. F. J. Schonell, Goldsmiths' College, London.

DIAGNOSTIC TESTS IN READING AND SPELLING, ARITHMETIC, ENGLISH
Dr. F. J. Schonell.

TESTS OF TEMPERAMENT AND CHARACTER
Dr. P. E. Vernon, Maudsley Hospital, London.

TESTS IN ÆSTHETICS
Dr. P. E. Vernon.

VOCATIONAL TESTS
Frank M. Earle, Principal, Kirkcaldy High School.

MEASURING THE INTELLIGENCE OF ABNORMAL ADULTS
Miss Constance Simmins, Institute of Medical Psychology, London.

MENTAL TESTS FOR PRIMITIVE RACES
Dr. R. A. C. Oliver.

Price **2s. 6d.** net. **2s. 9d.** (post free)

EVANS BROTHERS LIMITED
Montague House, Russell Square, London, W.C.1

3 0112 061438237

A REVIEW OF EDUCATIONAL THOUGHT

Five distinguished authors present in this volume a review of the philosophy of education in the United Kingdom, America, and France. Professor Clarke provides a general survey entitled " The Conflict of Philosophies." He is followed by Professor Cavenagh, of Reading University, who writes on " The Development of Educational Thought in the United Kingdom, 1920–1935." Dr. C. W. Valentine, of Birmingham University, writes on " Educational Psychology in the United Kingdom," while Dr. I. L. Kandel, of Columbia University, New York, contributes an illuminating section on the " American Philosophy of Education." M. Gérard Milhaud completes the volume with a study of " French Educational Philosophy."

The volume provides a comprehensive and authoritative survey of educational philosophy in the countries under review, and a study of its contents will make clear many of the post-war tendencies of education.

Price 2*s.* net, post free 2*s.* 3*d.*

THE TRAINING OF TEACHERS

By W. FRASER MITCHELL
Department of Education, The University, Reading

and GEORGES BEAULAVON
Honorary Inspector of the Paris Academy

The first section of this book covers the training of teachers in Europe, U.S.A., and the British Dominions from 1920–1935. Mr. Fraser Mitchell gives an account of the effects on education of the post-war world, and the repercussions of these changes on the training of teachers. Thus we find the Russian, Italian, and German Revolutions all affecting the training of teachers. In Great Britain and the Dominions there has been a steady tendency towards humanism in post-primary education, while America is insisting more and more on equality as the keystone both of her social and educational structure.

In short, Mr. Fraser Mitchell's review attempts to relate facts and tendencies in the sphere of the training of teachers to the great social and political movements which are rapidly reshaping the modern world. M. Beaulavon, in the second part of the book, presents a study of the training of secondary school teachers in France.

Price 1*s.* 6*d.* net, post free 1*s.* 8*d.*

EVANS BROTHERS LIMITED
Montague House, Russell Square, London, W.C.1